

CC useful as research reagents and kits, or for diagnostics, therapeutics
CC and prophylaxis, e.g. to prevent or delay infection, inflammation or
CC tumour formation. NAC is also known as a death effector filament-forming
CC CED4-like apoptosis protein (DFRCAP). NAC is located on human chromosome
CC 17p13. The present sequence represents a human NAC chimeric
CC phosphorothioate antisense oligonucleotide, which is given in the
CC exemplification of the present invention
XX

SO Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 5140 GGACATGGAGCACTTGCCCT 5159
Db 20 GGACATGGAGCACTTGCCCT 1

RESULT 83
ACC45158/C
ID ACC45158 standard; DNA; 20 BP.

AC ACC45158;
XX

DT 16-JUN-2003 (first entry)
XX

DE Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:18.
XX

KM Human; cytostatic; neurotropic; neuroprotective; antiinflammatory;
KM antisense therapy; NAC; DFRCAP; hyperproliferative disease; apoptosis;
KM death effector filament-forming CED4-like apoptosis protein;
KM neurological disease; infection; inflammation; tumour formation;
KM phosphorothioate; ss.
XX

OS Homo sapiens.
OS Synthetic.
XX

PH Key Location/Qualifiers
FT 1. .20
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
FT modified_base 1. .5
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FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
FT modified_base 16. .20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
FT Homo sapiens.
FT Synthetic.
XX

PN WO2003024988-A1.
XX

PD 27-MAR-2003.
XX

PF 19-SEP-2002; 2002WO-US029664.
XX

PR 19-SEP-2001; 2001US-00956712.
XX

PA (ISIS-) ISIS PHARM INC.
XX

PI Bennett CF, Freier SM;
XX

WPI; 2003-354583/33.
XX

PT New antisense compounds, useful for modulating the expression of NAC or
PT for treating a disease or condition associated with the expression of
PT NAC, e.g. hyperproliferative disease or neurological disease.
XX

PS Exampel 15; Page 75; 147pp; English.
XX

CC The present invention describes a compound (I) 8-50 nucleobases in length

CC targeted to a nucleic acid molecule encoding NAC, where the compound
CC specifically hybridises with the nucleic acid molecule encoding NAC and
CC inhibits the expression of NAC. The compound specifically hybridises with
CC at least an 8-nucleobase portion of an active site on a nucleic acid
CC molecule encoding NAC. Also described: (1) a composition comprising (1)
CC and a pharmaceutical carrier or diluent; (2) inhibiting the expression of
CC NAC in cells or tissues comprising contacting the cells or tissues with
CC (1); and (3) treating an animal having a disease or condition associated
CC with NAC comprising administering (1) to the animal so that expression of
CC NAC is inhibited. (1) has cytostatic, neurotropic, neuroprotective and
CC antiinflammatory activities, and can be used in antisense therapy. The
CC antisense compounds (1) are useful for modulating the expression of NAC,
CC and for treating a disease or condition associated with expression of
CC NAC, e.g. hyperproliferative disease, neurological disease, or a disease
CC or disorder arising from aberrant apoptosis. The compounds are also
CC useful as research reagents and kits, or for diagnostics, therapeutics
CC and prophylaxis, e.g. to prevent or delay infection, inflammation or
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CC CED4-like apoptosis protein (DFRCAP). NAC is located on human chromosome
CC 17p13. The present sequence represents a human NAC chimeric
CC phosphorothioate antisense oligonucleotide, which is given in the
CC exemplification of the present invention
XX

SO Sequence 20 BP; 3 A; 7 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 406 GAATGCTGATATAGAGACGG 425
Db 20 GAATGCTGATATAGAGACGG 1

RESULT 84
ACC45170/C
ID ACC45170 standard; DNA; 20 BP.

AC ACC45170;
XX

DT 16-JUN-2003 (first entry)
XX

DE Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:30.
XX

KM Human; cytostatic; neurotropic; neuroprotective; antiinflammatory;
KM antisense therapy; NAC; DFRCAP; hyperproliferative disease; apoptosis;
KM death effector filament-forming CED4-like apoptosis protein;
KM neurological disease; infection; inflammation; tumour formation;
KM phosphorothioate; ss.
XX

OS Homo sapiens.
OS Synthetic.
XX

PH Key Location/Qualifiers
FT 1. .20
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
FT modified_base 1. .5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
FT modified_base 16. .20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
FT Homo sapiens.
FT Synthetic.
XX

PN WO2003024988-A1.
XX

PD 27-MAR-2003.
XX

PF 19-SEP-2002; 2002WO-US029664.
XX

PR 19-SEP-2001; 2001US-00956712.
XX
XX (ISIS-) ISIS PHARM INC.
PI Bennett CF, Freier SM;
XX WPI; 2003-354583/33.
DR
XX New antisense compounds, useful for modulating the expression of NAC or
PT for treating a disease or condition associated with the expression of
PT NAC, e.g. hyperproliferative disease or neurological disease.
XX
PS Claim 3; Page 75; 147p; English.
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XX The present invention describes a compound (I) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule encoding NAC, where the compound
CC specifically hybridizes with the nucleic acid molecule encoding NAC and
CC inhibits the expression of NAC. The compound specifically hybridizes with
CC at least an 8-nucleobase portion of an active site on a nucleic acid
CC molecule encoding NAC. Also described: (1) a composition comprising (I)
CC and a pharmaceutical carrier or diluent; (2) inhibiting the expression of
CC NAC in cells or tissues comprising contacting the cells or tissues with
CC (I); and (3) treating an animal having a disease or condition associated
CC with NAC comprising administering (I) to the animal so that expression of
CC NAC is inhibited. (I) has cytosstatic, neurotropic, neuroprotective and
CC antiinflammatory activities, and can be used in antisense therapy. The
CC antisense compounds (I) are useful for modulating the expression of NAC,
CC and for treating a disease or condition associated with expression of
CC NAC, e.g. hyperproliferative disease, neurological disease, or a disease
CC or disorder arising from aberrant apoptosis. The compounds are also
CC useful as research reagents and kits, or for diagnostics, therapeutics
CC and prophylaxis, e.g. to prevent or delay infection, inflammation or
CC tumour formation. NAC is also known as a death effector filament-forming
CC CED4-like apoptosis protein (DEFCAP). NAC is located on human chromosome
CC 17p13. The present sequence represents a human NAC chimeric
CC phosphorothioate antisense oligonucleotide, which is given in the
CC exemplification of the present invention
XX
SQ Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1872 CGAGGATCTTCTTGATCA 1891
DB 20 CGAGGATCTTCTTGATCA 1
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XX RESULT 85
ACCA5172/c
ID ACCA5172 standard; DNA; 20 BP.
XX
XX ACCA5172;
AC
XX 16-JUN-2003 (first entry)
DT
XX Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:32.
XX
XX Human; cytosstatic; neurotropic; neuroprotective; antiinflammatory;
KM antisense therapy; NAC; DEFCAP; hyperproliferative disease; apoptosis;
KM death effector filament-forming CED4-like apoptosis protein;
KM neurological disease; infection; inflammation; tumour formation;
KM phosphorothioate; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
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FT /+tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"

FT modified_base 1..5
FT /+tag= b
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
FT modified_base 15..20
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FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
XX
XX WO2003024988-A1.
PN
XX 27-MAR-2003.
PD
XX
XX 19-SEP-2002; 2002WO-US029664.
XX
XX 19-SEP-2001; 2001US-00956712.
PR
XX (ISIS-) ISIS PHARM INC.
PA Bennett CF, Freier SM;
XX WPI; 2003-354583/33.
DR
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PT for treating a disease or condition associated with the expression of
PT NAC, e.g. hyperproliferative disease or neurological disease.
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CC NAC in cells or tissues comprising contacting the cells or tissues with
CC (I); and (3) treating an animal having a disease or condition associated
CC with NAC comprising administering (I) to the animal so that expression of
CC NAC is inhibited. (I) has cytosstatic, neurotropic, neuroprotective and
CC antiinflammatory activities, and can be used in antisense therapy. The
CC antisense compounds (I) are useful for modulating the expression of NAC,
CC and for treating a disease or condition associated with expression of
CC NAC, e.g. hyperproliferative disease, neurological disease, or a disease
CC or disorder arising from aberrant apoptosis. The compounds are also
CC useful as research reagents and kits, or for diagnostics, therapeutics
CC and prophylaxis, e.g. to prevent or delay infection, inflammation or
CC tumour formation. NAC is also known as a death effector filament-forming
CC CED4-like apoptosis protein (DEFCAP). NAC is located on human chromosome
CC 17p13. The present sequence represents a human NAC chimeric
CC phosphorothioate antisense oligonucleotide, which is given in the
CC exemplification of the present invention
XX
SQ Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2679 CCACGCTTGTACGAGATC 2698
DB 20 CCACGCTTGTACGAGATC 1
XX
XX RESULT 86
ACCA5179/c
ID ACCA5179 standard; DNA; 20 BP.
XX
XX ACCA5179;
AC
XX 16-JUN-2003 (first entry)
DT
XX Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:39.
DE

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XX Human: cytostatic; neuroprotective; antiinflammatory;
KM antisense therapy; NAC; DEFCAP; hyperproliferative disease; apoptosis;
KM death effector filament-forming CED4-like apoptosis protein;
KM neurological disease; infection; inflammation; tumour formation;
KM phosphorothioate; ss.
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate backbone"
XX modified_base 1..5
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XX FT /mod_base= OTHER
XX FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
XX modified_base 16..20
XX FT /*tag= c
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XX FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
XX
XX W02003024988-A1.
XX
XX 27-MAR-2003.
XX
XX 19-SEP-2002; 2002WO-US029664.
XX
XX 19-SEP-2001; 2001US-00956712.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Freiler SM;
XX WPI; 2003-354583/33.
XX
XX New antisense compounds, useful for modulating the expression of NAC or
XX for treating a disease or condition associated with the expression of
XX NAC, e.g. hyperproliferative disease or neurological disease.
XX
XX Example 15; Page 75; 147bp; English.
XX
XX The present invention describes a compound (I) 8-50 nucleobases in length
XX targeted to a nucleic acid molecule encoding NAC, where the compound
XX specifically hybridises with the nucleic acid molecule encoding NAC and
XX inhibits the expression of NAC. The compound specifically hybridises with
XX at least an 8-nucleobase portion of an active site on a nucleic acid
XX molecule encoding NAC. Also described: (1) a composition comprising (I)
XX and a pharmaceutical carrier or diluent; (2) inhibiting the expression of
XX NAC in cells or tissues comprising contacting the cells or tissues with
XX (I); and (3) treating an animal having a disease or condition associated
XX with NAC comprising administering (I) to the animal so that expression of
XX NAC is inhibited. (I) has cytostatic, neuroprotective and
XX antiinflammatory activities, and can be used in antisense therapy. The
XX antisense compounds (I) are useful for modulating the expression of NAC,
XX and for treating a disease or condition associated with expression of
XX NAC, e.g. hyperproliferative disease, neurological disease, or a disease
XX or disorder arising from aberrant apoptosis. The compounds are also
XX useful as research reagents and kits, or for diagnostics, therapeutics
XX and prophylaxis, e.g. to prevent or delay infection, inflammation or
XX tumour formation. NAC is also known as a death effector filament-forming
XX CED4-like apoptosis protein (DEFCAP). NAC is located on human chromosome
XX 17p13. The present sequence represents a human NAC chimeric
XX phosphorothioate antisense oligonucleotide, which is given in the
XX exemplification of the present invention
XX
XX Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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XX
XX 3383 TACGCTGGGGCTGACACG 3402
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XX Db 20 TACGCTGGGGCTGACACG 1
XX
XX RESULT 87
XX ACC45181/c
XX ID ACC45181 standard; DNA; 20 BP.
XX
XX ACC45181;
XX
XX 16-JUN-2003 (first entry)
XX
XX Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:41.
XX
XX Human: cytostatic; neuroprotective; antiinflammatory;
KM antisense therapy; NAC; DEFCAP; hyperproliferative disease; apoptosis;
KM death effector filament-forming CED4-like apoptosis protein;
KM neurological disease; infection; inflammation; tumour formation;
KM phosphorothioate; ss.
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate backbone"
XX modified_base 1..5
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XX FT /mod_base= OTHER
XX FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
XX modified_base 16..20
XX FT /*tag= c
XX FT /mod_base= OTHER
XX FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
XX
XX W02003024988-A1.
XX
XX 27-MAR-2003.
XX
XX 19-SEP-2002; 2002WO-US029664.
XX
XX 19-SEP-2001; 2001US-00956712.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Freiler SM;
XX WPI; 2003-354583/33.
XX
XX New antisense compounds, useful for modulating the expression of NAC or
XX for treating a disease or condition associated with the expression of
XX NAC, e.g. hyperproliferative disease or neurological disease.
XX
XX Example 15; Page 75; 147bp; English.
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XX The present invention describes a compound (I) 8-50 nucleobases in length
XX targeted to a nucleic acid molecule encoding NAC, where the compound
XX specifically hybridises with the nucleic acid molecule encoding NAC and
XX inhibits the expression of NAC. The compound specifically hybridises with
XX at least an 8-nucleobase portion of an active site on a nucleic acid
XX molecule encoding NAC. Also described: (1) a composition comprising (I)
XX and a pharmaceutical carrier or diluent; (2) inhibiting the expression of
XX NAC in cells or tissues comprising contacting the cells or tissues with
XX (I); and (3) treating an animal having a disease or condition associated
XX with NAC comprising administering (I) to the animal so that expression of
XX NAC is inhibited. (I) has cytostatic, neuroprotective and
XX antiinflammatory activities, and can be used in antisense therapy. The
XX antisense compounds (I) are useful for modulating the expression of NAC,
XX and for treating a disease or condition associated with expression of
XX

```

CC NAC, e.g. hyperproliferative disease, neurological disease, or a disease
CC or disorder arising from aberrant apoptosis. The compounds are also
CC useful as research reagents and kits, or for diagnostics, therapeutics
CC and prophylaxis, e.g. to prevent or delay infection, inflammation or
CC tumour formation. NAC is also known as a death effector filament-forming
CC CED4-like apoptosis protein (DEFCAP). NAC is located on human chromosome
CC 17p13. The present sequence represents a human NAC chimeric
CC phosphorothioate antisense oligonucleotide, which is given in the
CC exemplification of the present invention

XX
SQ Sequence 20 BP; 2 A; 9 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3419 AGATGAGCGAGACTGAGG 3438
DB 20 AGATGAGCGAGACTGAGG 1

RESULT 88
ACC45187/c
ID ACC45187 standard; DNA; 20 BP.

XX
AC ACC45187;
XX
DT 16-JUN-2003 (first entry)

XX
DE Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:47.

XX
KW Human; cytostatic; nootropic; neuroprotective; antiinflammatory;
KW antisense therapy; NAC; DEFCAP; hyperproliferative disease; apoptosis;
KW death effector filament-forming CED4-like apoptosis protein;
KW neurological disease; infection; inflammation; tumour formation;
KW phosphorothioate; ss.

XX
OS Homo sapiens.
OS Synthetic.

XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"

XX
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"

XX
FT modified_base 16..20
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XX
PN WO2003024988-A1.

XX
PD 27-MAR-2003.

XX
PF 19-SEP-2002; 2002WO-US029664.

XX
PR 19-SEP-2001; 2001US-00956712.

XX
PA (ISIS-) ISIS PHARM INC.

XX
PI Bennett CF, Freier SM;

XX
DR WPI; 2003-354583/33.

XX
PT New antisense compounds, useful for modulating the expression of NAC or
PT for treating a disease or condition associated with the expression of
PT NAC, e.g. hyperproliferative disease or neurological disease.

XX
PS Claim 3; Page 75; 147p; English.

XX
CC The present invention describes a compound (I) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule encoding NAC, where the compound
CC specifically hybridises with the nucleic acid molecule encoding NAC and
CC inhibits the expression of NAC. The compound specifically hybridises with
CC at least an 8-nucleobase portion of an active site on a nucleic acid
CC molecule encoding NAC. Also described: (1) a composition comprising (I)
CC and a pharmaceutical carrier or diluent; (2) inhibiting the expression of
CC NAC in cells or tissues comprising contacting the cells or tissues with
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SQ Sequence 20 BP; 3 A; 9 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3874 GTGATGAGAGAGCGGTGAC 3893
DB 20 GTGATGAGAGAGCGGTGAC 1

RESULT 89
ACC45206/c
ID ACC45206 standard; DNA; 20 BP.

XX
AC ACC45206;
XX
DT 16-JUN-2003 (first entry)

XX
DE Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:66.

XX
KW Human; cytostatic; nootropic; neuroprotective; antiinflammatory;
KW antisense therapy; NAC; DEFCAP; hyperproliferative disease; apoptosis;
KW death effector filament-forming CED4-like apoptosis protein;
KW neurological disease; infection; inflammation; tumour formation;
KW phosphorothioate; ss.

XX
OS Homo sapiens.
OS Synthetic.

XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"

XX
FT modified_base 1..5
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FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"

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FT modified_base 16..20
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XX
PN WO2003024988-A1.

XX
PD 27-MAR-2003.

PF 19-SEP-2002; 2002MO-US029664.
 XX 19-SEP-2001; 2001US-00956712.
 PR (ISIS-) ISIS PHARM INC.
 XX (ISIS-) ISIS PHARM INC.
 PA Bennett CF, Freier SM,
 PI Bennett CF, Freier SM,
 XX WPI; 2003-354583/33.
 DR
 PT New antisense compounds, useful for modulating the expression of NAC or
 PT for treating a disease or condition associated with the expression of
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 SQ Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 4956 GCATTATGTCATGCCAG 4975
 Db 20 GCATTATGTCATGCCAG 1
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 XX ACC45154;
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 XX 16-JUN-2003 (first entry)
 DT
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 DE Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:14.
 XX
 KM Human; cytostatic; neurotropic; neuroprotective; antiinflammatory;
 KM antisense therapy; NAC; DEFCAP; hyperproliferative disease; apoptosis;
 KM death effector filament-forming CED4-like apoptosis protein;
 KM neurological disease; infection; inflammation; tumour formation;
 KM phosphorothioate; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
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FT /mod_base= OTHER
 FT /note= "phosphorothioate backbone"
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 FT
 PN WO2003024988-A1.
 PD 27-MAR-2003.
 XX
 PF 19-SEP-2002; 2002MO-US029664.
 XX 19-SEP-2001; 2001US-00956712.
 PR (ISIS-) ISIS PHARM INC.
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 PI Bennett CF, Freier SM,
 XX WPI; 2003-354583/33.
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 CC useful as research reagents and kits, or for diagnostics, therapeutics
 CC and prophylaxis, e.g. to prevent or delay infection, inflammation or
 CC tumour formation. NAC is also known as a death effector filament-forming
 CC CED4-like apoptosis protein (DEFCAP). NAC is located on human chromosome
 CC 17p13. The present sequence represents a human NAC chimeric
 CC phosphorothioate antisense oligonucleotide, which is given in the
 CC exemplification of the present invention
 CC
 XX
 SQ Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 61 GGGTCTGAAGCCATTCC 80
 Db 20 GGGTCTGAAGCCATTCC 1
 RESULT 91
 ACC45155/c
 ID ACC45155 standard; DNA; 20 BP.
 XX ACC45155;
 AC
 XX 16-JUN-2003 (first entry)
 DT

XX Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:15.
DE
XX
XX Human; cytostatic; neutropic; neuroprotective; antiinflammatory;
KM antisense therapy; NAC; DEFCAP; hyperproliferative disease; apoptosis;
KM death effector filament-forming CED4-like apoptosis protein;
KM neurological disease; infection; inflammation; tumour formation;
KM phosphorothioate; ss.
XX
XX Homo sapiens.
OS Synthetic.
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
XX
XX WO2003024988-A1.
PN
XX
XX 27-MAR-2003.
PD
XX
XX 19-SEP-2002; 2002WO-US029664.
PP
XX
XX 19-SEP-2001; 2001US-00956712.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX Bennett CF, Freier SM;
PI
XX
XX WPI; 2003-354583/33.
DR
XX
XX
XX New antisense compounds, useful for modulating the expression of NAC or
PT for treating a disease or condition associated with the expression of
PT NAC, e.g. hyperproliferative disease or neurological disease.
XX
XX
XX Example 15; Page 75; 147pp; English.
XX
XX The present invention describes a compound (I) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule encoding NAC, where the compound
CC specifically hybridises with the nucleic acid molecule encoding NAC and
CC inhibits the expression of NAC. The compound specifically hybridises with
CC at least an 8-nucleobase portion of an active site on a nucleic acid
CC molecule encoding NAC. Also described: (1) a composition comprising (I)
CC and a pharmaceutical carrier or diluent; (2) inhibiting the expression of
CC NAC in cells or tissues comprising contacting the cells or tissues with
CC (1); and (3) treating an animal having a disease or condition associated
CC with NAC comprising administering (I) to the animal so that expression of
CC NAC is inhibited. (I) has cytostatic, neutropic, neuroprotective and
CC antiinflammatory activities, and can be used in antisense therapy. The
CC antisense compounds (I) are useful for modulating the expression of NAC,
CC and for treating a disease or condition associated with expression of
CC NAC, e.g. hyperproliferative disease, neurological disease, or a disease
CC or disorder arising from aberrant apoptosis. The compounds are also
CC useful as research reagents and kits, or for diagnostics, therapeutics
CC and prophylaxis, e.g. to prevent or delay infection, inflammation or
CC tumour formation. NAC is also known as a death effector filament-forming
CC CED4-like apoptosis protein (DEFCAP). NAC is located on human chromosome
CC 17p13. The present sequence represents a human NAC chimeric
CC phosphorothioate antisense oligonucleotide, which is given in the
CC exemplification of the present invention
XX
XX Sequence 20 BP; 6 A; 4 C; 9 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 75 CATTCCTGCTCTGCGGCTC 94
DB 20 CATTCCTGCTCTGCGGCTC 1
RESULT 92
ACCA5161/c
ID ACCA5161 standard; DNA; 20 BP.
XX
XX ACCA5161;
DT 16-JUN-2003 (first entry)
XX
XX Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:21.
DE
XX
XX Human; cytostatic; neutropic; neuroprotective; antiinflammatory;
KM antisense therapy; NAC; DEFCAP; hyperproliferative disease; apoptosis;
KM death effector filament-forming CED4-like apoptosis protein;
KM neurological disease; infection; inflammation; tumour formation;
KM phosphorothioate; ss.
XX
XX Homo sapiens.
OS Synthetic.
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
XX
XX
XX WO2003024988-A1.
PN
XX
XX 27-MAR-2003.
PD
XX
XX 19-SEP-2002; 2002WO-US029664.
PP
XX
XX 19-SEP-2001; 2001US-00956712.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX Bennett CF, Freier SM;
PI
XX
XX WPI; 2003-354583/33.
DR
XX
XX
XX New antisense compounds, useful for modulating the expression of NAC or
PT for treating a disease or condition associated with the expression of
PT NAC, e.g. hyperproliferative disease or neurological disease.
XX
XX
XX Claim 3; Page 75; 147pp; English.
XX
XX The present invention describes a compound (I) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule encoding NAC, where the compound
CC specifically hybridises with the nucleic acid molecule encoding NAC and
CC inhibits the expression of NAC. The compound specifically hybridises with
CC at least an 8-nucleobase portion of an active site on a nucleic acid
CC molecule encoding NAC. Also described: (1) a composition comprising (I)
CC and a pharmaceutical carrier or diluent; (2) inhibiting the expression of
CC NAC in cells or tissues comprising contacting the cells or tissues with
CC (1); and (3) treating an animal having a disease or condition associated
CC with NAC comprising administering (I) to the animal so that expression of
CC NAC is inhibited. (I) has cytostatic, neutropic, neuroprotective and
CC antiinflammatory activities, and can be used in antisense therapy. The

CC antisense compounds (1) are useful for modulating the expression of NAC,
CC and for treating a disease or condition associated with expression of
CC NAC, e.g. hyperproliferative disease, neurological disease, or a disease
CC or disorder arising from aberrant apoptosis. The compounds are also
CC useful as research reagents and kits, or for diagnostics, therapeutics
CC and prophylaxis, e.g. to prevent or delay infection, inflammation or
CC tumour formation. NAC is also known as a death effector filament-forming
CC CED4-like apoptosis protein (DFCAP). NAC is located on human chromosome
CC 17p13. The present sequence represents a human NAC chimeric
CC phosphorothioate antisense oligonucleotide, which is given in the
CC exemplification of the present invention
CC
SQ Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 581 AGCTGAAGAGTCCAGCTT 600
DB 20 AGCTGAAGAGTCCAGCTT 1
RESULT 93
ACC45166/c
ID ACC45166 standard; DNA; 20 BP.
AC ACC45166;
AC
XX 16-JUN-2003 (first entry)
DT
XX
DE Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:26.
XX
KM Human; cytostatic; neurotropic; neuroprotective; antiinflammatory;
KM antisense therapy; NAC; DFCAP; hyperproliferative disease; apoptosis;
KM death effector filament-forming CED4-like apoptosis protein;
KM neurological disease; infection; inflammation; tumour formation;
KM phosphorothioate; ss.
XX
OS Homo sapiens.
OS Synthetic.
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
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FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
FT modified_base 16..20
FT /*tag= c
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XX
XX WO2003024988-A1.
XX
XX 27-MAR-2003.
XX
XX 19-SEP-2002; 2002WO-US023664.
XX
XX 19-SEP-2001; 2001US-00956712.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Benmett CF, Freier SM;
XX
XX WPI, 2003-354583/33.
XX
XX New antisense compounds, useful for modulating the expression of NAC or
PT for treating a disease or condition associated with the expression of
PT NAC, e.g. hyperproliferative disease or neurological disease.

XX
PS Claim 3; Page 75; 147bp; English.
XX
XX The present invention describes a compound (1) 8-50 nucleobases in length
XX targeted to a nucleic acid molecule encoding NAC, where the compound
XX specifically hybridises with the nucleic acid molecule encoding NAC and
XX inhibits the expression of NAC. The compound specifically hybridises with
XX at least an 8-nucleobase portion of an active site on a nucleic acid
XX molecule encoding NAC. Also described: (1) a composition comprising (1)
XX and a pharmaceutical carrier or diluent; (2) inhibiting the expression of
XX NAC in cells or tissues comprising contacting the cells or tissues with
XX (1); and (3) treating an animal having a disease or condition associated
XX with NAC comprising administering (1) to the animal so that expression of
XX NAC is inhibited. (1) has cytostatic, neurotropic, neuroprotective and
XX antiinflammatory activities, and can be used in antisense therapy. The
XX antisense compounds (1) are useful for modulating the expression of NAC,
XX and for treating a disease or condition associated with expression of
XX NAC, e.g. hyperproliferative disease, neurological disease, or a disease
XX or disorder arising from aberrant apoptosis. The compounds are also
XX useful as research reagents and kits, or for diagnostics, therapeutics
XX and prophylaxis, e.g. to prevent or delay infection, inflammation or
XX tumour formation. NAC is also known as a death effector filament-forming
XX CED4-like apoptosis protein (DFCAP). NAC is located on human chromosome
XX 17p13. The present sequence represents a human NAC chimeric
XX phosphorothioate antisense oligonucleotide, which is given in the
XX exemplification of the present invention
XX
SQ Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1121 AGCTCTCGAGACCCATAG 1140
DB 20 AGCTCTCGAGACCCATAG 1
RESULT 94
ACC45198/c
ID ACC45198 standard; DNA; 20 BP.
AC ACC45198;
AC
XX 16-JUN-2003 (first entry)
DT
XX
DE Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:58.
XX
KM Human; cytostatic; neurotropic; neuroprotective; antiinflammatory;
KM antisense therapy; NAC; DFCAP; hyperproliferative disease; apoptosis;
KM death effector filament-forming CED4-like apoptosis protein;
KM neurological disease; infection; inflammation; tumour formation;
KM phosphorothioate; ss.
XX
OS Homo sapiens.
OS Synthetic.
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
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FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
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FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
XX
XX WO2003024988-A1.
XX

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PD 27-MAR-2003.
XX
XX 19-SEP-2002; 2002WO-US029664.
PF
XX 19-SEP-2001; 2001US-00956712.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Bennett CF, Freier SM;
PI
XX WPI; 2003-354583/33.
XX
XX New antisense compounds, useful for modulating the expression of NAC or
PT for treating a disease or condition associated with the expression of
PT NAC, e.g. hyperproliferative disease or neurological disease.
XX
XX Example 15; Page 76; 147pp; English.
XX
XX The present invention describes a compound (1) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule encoding NAC, where the compound
CC specifically hybridises with the nucleic acid molecule encoding NAC and
CC inhibits the expression of NAC. The compound specifically hybridises with
CC at least an 8-nucleobase portion of an active site on a nucleic acid
CC molecule encoding NAC. Also described: (1) a composition comprising (1)
CC and a pharmaceutical carrier or diluent; (2) inhibiting the expression of
CC NAC in cells or tissues comprising contacting the cells or tissues with
CC (1); and (3) treating an animal having a disease or condition associated
CC with NAC comprising administering (1) to the animal so that expression of
CC NAC is inhibited. (1) has cytostatic, neurotropic, neuroprotective and
CC antiinflammatory activities, and can be used in antisense therapy. The
CC antisense compounds (1) are useful for modulating the expression of NAC,
CC and for treating a disease or condition associated with expression of
CC NAC, e.g. hyperproliferative disease, neurological disease, or a disease
CC or disorder arising from aberrant apoptosis. The compounds are also
CC useful as research reagents and kits, or for diagnostics, therapeutics
CC and prophylaxis, e.g. to prevent or delay infection, inflammation or
CC tumour formation. NAC is also known as a death effector filament-forming
CC CED4-like apoptosis protein (DEFCAP). NAC is located on human chromosome
CC 17p13. The present sequence represents a human NAC chimeric
CC phosphorothioate antisense oligonucleotide, which is given in the
CC exemplification of the present invention
XX
SQ Sequence 20 BP; 5 A; 9 C; 2 G; 4 T; 0 U; 0 Other;
Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4565 GAGTGCATCGGTGAGGTT 4584
DB 20 GAGTGCATCGGTGAGGTT 1
RESULT 95
ACCA45202/c
ID ACC45202 standard; DNA; 20 BP.
XX
XX ACC45202;
AC
XX
XX 16-JUN-2003 (first entry)
XX
XX Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:62.
DE
XX
XX Human; cytostatic; neurotropic; neuroprotective; antiinflammatory;
KM antisense therapy; NAC; DEFCAP; hyperproliferative disease; apoptosis;
KM death effector filament-forming CED4-like apoptosis protein;
KM neurological disease; infection; inflammation; tumour formation;
KM phosphorothioate; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key location/Qualifiers
PH
```

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FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
FT
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
FT
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
XX
XX WO2003024988-A1.
XX
XX 27-MAR-2003.
XX
XX 19-SEP-2002; 2002WO-US029664.
XX
XX 19-SEP-2001; 2001US-00956712.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX Bennett CF, Freier SM;
PI
XX WPI; 2003-354583/33.
XX
XX New antisense compounds, useful for modulating the expression of NAC or
PT for treating a disease or condition associated with the expression of
PT NAC, e.g. hyperproliferative disease or neurological disease.
XX
XX Example 15; Page 76; 147pp; English.
XX
XX The present invention describes a compound (1) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule encoding NAC, where the compound
CC specifically hybridises with the nucleic acid molecule encoding NAC and
CC inhibits the expression of NAC. The compound specifically hybridises with
CC at least an 8-nucleobase portion of an active site on a nucleic acid
CC molecule encoding NAC. Also described: (1) a composition comprising (1)
CC and a pharmaceutical carrier or diluent; (2) inhibiting the expression of
CC NAC in cells or tissues comprising contacting the cells or tissues with
CC (1); and (3) treating an animal having a disease or condition associated
CC with NAC comprising administering (1) to the animal so that expression of
CC NAC is inhibited. (1) has cytostatic, neurotropic, neuroprotective and
CC antiinflammatory activities, and can be used in antisense therapy. The
CC antisense compounds (1) are useful for modulating the expression of NAC,
CC and for treating a disease or condition associated with expression of
CC NAC, e.g. hyperproliferative disease, neurological disease, or a disease
CC or disorder arising from aberrant apoptosis. The compounds are also
CC useful as research reagents and kits, or for diagnostics, therapeutics
CC and prophylaxis, e.g. to prevent or delay infection, inflammation or
CC tumour formation. NAC is also known as a death effector filament-forming
CC CED4-like apoptosis protein (DEFCAP). NAC is located on human chromosome
CC 17p13. The present sequence represents a human NAC chimeric
CC phosphorothioate antisense oligonucleotide, which is given in the
CC exemplification of the present invention
XX
SQ Sequence 20 BP; 3 A; 5 C; 8 G; 4 T; 0 U; 0 Other;
Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4789 GGACTCTGCCACTCAGCAG 4808
DB 20 GGACTCTGCCACTCAGCAG 1
RESULT 96
ACCA45159/c
ID ACC45159 standard; DNA; 20 BP.
XX
XX ACC45159;
AC
```

XX 16-JUN-2003 (first entry)
DT Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:19.
XX
XX Human; cytostatic; neurotropic; neuroprotective; antiinflammatory;
KM antisense therapy; NAC; DEFCAP; hyperproliferative disease; apoptosis;
KM death effector filament-forming CED4-like apoptosis protein;
KM neurological disease; infection; inflammation; tumour formation;
KM phosphorothioate; ss.
XX Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
XX WO2003024988-A1.
PN
XX
XX 27-MAR-2003.
PD
XX
XX 19-SEP-2002; 2002WO-US029664.
PP
XX 19-SEP-2001; 2001US-00956712.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Bennett CF, Freiler SM;
PI
XX
XX WPI; 2003-354583/33.
DR
XX
XX
XX New antisense compounds, useful for modulating the expression of NAC or
PT for treating a disease or condition associated with the expression of
PT NAC, e.g. hyperproliferative disease or neurological disease.
PT
XX
XX
XX Claim 3; Page 75; 147pp; English.
PS
XX
XX The present invention describes a compound (I) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule encoding NAC, where the compound
CC specifically hybridises with the nucleic acid molecule encoding NAC and
CC inhibits the expression of NAC. The compound specifically hybridises with
CC at least an 8-nucleobase portion of an active site on a nucleic acid
CC molecule encoding NAC. Also described: (1) a composition comprising (I)
CC and a pharmaceutical carrier or diluent; (2) inhibiting the expression of
CC NAC in cells or tissues comprising contacting the cells or tissues with
CC (I); and (3) treating an animal having a disease or condition associated
CC with NAC comprising administering (I) to the animal so that expression of
CC NAC is inhibited. (I) has cytostatic, neurotropic, neuroprotective and
CC antiinflammatory activities, and can be used in antisense therapy. The
CC antisense compound (I) are useful for modulating the expression of NAC,
CC and for treating a disease or condition associated with expression of
CC NAC, e.g. hyperproliferative disease, neurological disease, or a disease
CC or disorder arising from aberrant apoptosis. The compounds are also
CC useful as research reagents and kits, or for diagnostics, therapeutics
CC and prophylaxis, e.g. to prevent or delay infection, inflammation or
CC tumour formation. NAC is also known as a death effector filament-forming
CC CED4-like apoptosis protein (DEFCAP). NAC is located on human chromosome
CC 17p13. The present sequence represents a human NAC chimeric
CC phosphorothioate antisense oligonucleotide, which is given in the
CC exemplification of the present invention
XX
XX Sequence 20 BP; 6 A; 4 C; 8 G; 2 T; 0 U; 0 Other;
SQ

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 445 CAGCACTGTTCTCTGCTGC 464
DB 20 CAGCACTGTTCTCTGCTGC 1
RESULT 97
ACC45167/c
ID ACC45167 standard; DNA; 20 BP.
XX
XX ACC45167;
AC
XX
XX 16-JUN-2003 (first entry)
DT
XX
XX Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:27.
DE
XX
XX Human; cytostatic; neurotropic; neuroprotective; antiinflammatory;
KM antisense therapy; NAC; DEFCAP; hyperproliferative disease; apoptosis;
KM death effector filament-forming CED4-like apoptosis protein;
KM neurological disease; infection; inflammation; tumour formation;
KM phosphorothioate; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
FT modified_base 1..5
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FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
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FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
XX WO2003024988-A1.
PN
XX
XX 27-MAR-2003.
PD
XX
XX 19-SEP-2002; 2002WO-US029664.
PP
XX 19-SEP-2001; 2001US-00956712.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Bennett CF, Freiler SM;
PI
XX
XX WPI; 2003-354583/33.
DR
XX
XX
XX New antisense compounds, useful for modulating the expression of NAC or
PT for treating a disease or condition associated with the expression of
PT NAC, e.g. hyperproliferative disease or neurological disease.
PT
XX
XX
XX Claim 3; Page 75; 147pp; English.
PS
XX
XX The present invention describes a compound (I) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule encoding NAC, where the compound
CC specifically hybridises with the nucleic acid molecule encoding NAC and
CC inhibits the expression of NAC. The compound specifically hybridises with
CC at least an 8-nucleobase portion of an active site on a nucleic acid
CC molecule encoding NAC. Also described: (1) a composition comprising (I)
CC and a pharmaceutical carrier or diluent; (2) inhibiting the expression of
CC NAC in cells or tissues comprising contacting the cells or tissues with
CC (I); and (3) treating an animal having a disease or condition associated
CC with NAC comprising administering (I) to the animal so that expression of

CC NAC is inhibited. (I) has cytostatic, neurotropic, neuroprotective and
CC antiinflammatory activities, and can be used in antisense therapy. The
CC antisense compounds (I) are useful for modulating the expression of NAC,
CC and for treating a disease or condition associated with expression of
CC NAC, e.g. hyperproliferative disease, neurological disease, or a disease
CC or disorder arising from aberrant apoptosis. The compounds are also
CC useful as research reagents and kits, or for diagnostics, therapeutics
CC and prophylaxis, e.g. to prevent or delay infection, inflammation or
CC tumour formation. NAC is also known as a death effector filament-forming
CC CED4-like apoptosis protein (DEFCAP). NAC is located on human chromosome
CC 17p13. The present sequence represents a human NAC chimeric
CC phosphorothioate antisense oligonucleotide, which is given in the
CC exemplification of the present invention
XX

Sequence 20 BP; 5 A; 4 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred.No. 1.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1329 GAAAATGAGATTATACC 1348
Db 20 GAAAATGAGATTATACC 1

RESULT 98
ACC45175/c
ID ACC45175 standard; DNA; 20 BP.

XX ACC45175;
XX
XX
XX 16-JUN-2003 (first entry)
XX
XX Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:35.
XX
XX Human; cytostatic; neurotropic; neuroprotective; antiinflammatory;
XX antisense therapy; NAC; DEFCAP; hyperproliferative disease; apoptosis;
XX death effector filament-forming CED4-like apoptosis protein;
XX neurological disease; infection; inflammation; tumour formation;
XX phosphorothioate; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX
XX Key Location/Qualifiers
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XX modified_base 16..20
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XX /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
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XX WO2003024988-A1.
XX
XX 27-MAR-2003.
XX
XX 19-SEP-2002; 2002WO-US029664.
XX
XX 19-SEP-2001; 2001US-00956712.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Freier SW;
XX
XX WPI; 2003-354583/33.
XX
XX New antisense compounds, useful for modulating the expression of NAC or
PT

PT for treating a disease or condition associated with the expression of
PT NAC, e.g. hyperproliferative disease or neurological disease.
XX
XX
XX Claim 3; Page 75; 147pp; English.

CC The present invention describes a compound (I) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule encoding NAC, where the compound
CC specifically hybridises with the nucleic acid molecule encoding NAC and
CC inhibits the expression of NAC. The compound specifically hybridises with
CC at least an 8-nucleobase portion of an active site on a nucleic acid
CC molecule encoding NAC. Also described: (1) a composition comprising (I)
CC and a pharmaceutical carrier or diluent; (2) inhibiting the expression of
CC NAC in cells or tissues comprising contacting the cells or tissues with
CC (I); and (3) treating an animal having a disease or condition associated
CC with NAC comprising administering (I) to the animal so that expression of
CC NAC is inhibited. (I) has cytostatic, neurotropic, neuroprotective and
CC antiinflammatory activities, and can be used in antisense therapy. The
CC antisense compounds (I) are useful for modulating the expression of NAC,
CC and for treating a disease or condition associated with expression of
CC NAC, e.g. hyperproliferative disease, neurological disease, or a disease
CC or disorder arising from aberrant apoptosis. The compounds are also
CC useful as research reagents and kits, or for diagnostics, therapeutics
CC and prophylaxis, e.g. to prevent or delay infection, inflammation or
CC tumour formation. NAC is also known as a death effector filament-forming
CC CED4-like apoptosis protein (DEFCAP). NAC is located on human chromosome
CC 17p13. The present sequence represents a human NAC chimeric
CC phosphorothioate antisense oligonucleotide, which is given in the
CC exemplification of the present invention
XX

Sequence 20 BP; 3 A; 4 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred.No. 1.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2929 GTCTCAAGTGCACGAAA 2948
Db 20 GTCTCAAGTGCACGAAA 1

RESULT 99
ACC45188/c
ID ACC45188 standard; DNA; 20 BP.

XX ACC45188;
XX
XX
XX 16-JUN-2003 (first entry)
XX
XX Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:48.
XX
XX Human; cytostatic; neurotropic; neuroprotective; antiinflammatory;
XX antisense therapy; NAC; DEFCAP; hyperproliferative disease; apoptosis;
XX death effector filament-forming CED4-like apoptosis protein;
XX neurological disease; infection; inflammation; tumour formation;
XX phosphorothioate; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "phosphorothioate backbone"
XX
XX modified_base 1..5
XX /tag= b
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
XX
XX modified_base 16..20
XX /tag= c
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
XX
XX

```
PN W02003024988-A1.
XX
XX 27-MAR-2003.
XX
XX 19-SEP-2002; 2002WO-US029664.
XX
XX 19-SEP-2001; 2001US-00956712.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Freier SM;
XX
XX WPI; 2003-354583/33.
XX
XX New antisense compounds, useful for modulating the expression of NAC or
PT for treating a disease or condition associated with the expression of
PT NAC, e.g. hyperproliferative disease or neurological disease.
XX
XX Claim 3; Page 75; 147pp; English.
XX
XX The present invention describes a compound (1) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule encoding NAC, where the compound
CC specifically hybridizes with the nucleic acid molecule encoding NAC and
CC inhibits the expression of NAC. The compound specifically hybridizes with
CC at least an 8-nucleobase portion of an active site on a nucleic acid
CC molecule encoding NAC. Also described: (1) a composition comprising (1)
CC and a pharmaceutical carrier or diluent; (2) inhibiting the expression of
CC NAC in cells or tissues comprising contacting the cells or tissues with
CC (1); and (3) treating an animal having a disease or condition associated
CC with NAC comprising administering (1) to the animal so that expression of
CC NAC is inhibited. (1) has cytostatic, neurotropic, neuroprotective and
CC antiinflammatory activities, and can be used in antisense therapy. The
CC antisense compound (1) are useful for modulating the expression of NAC,
CC and for treating a disease or condition associated with expression of
CC NAC, e.g. hyperproliferative disease, neurological disease, or a disease
CC or disorder arising from aberrant apoptosis. The compounds are also
CC useful as research reagents and kits, or for diagnostics, therapeutics
CC and prophylaxis, e.g. to prevent or delay infection, inflammation or
CC tumour formation. NAC is also known as a death effector filament-forming
CC CED4-like apoptosis protein (DEFCAP). NAC is located on human chromosome
CC 17p13. The present sequence represents a human NAC chimeric
CC phosphorothioate antisense oligonucleotide, which is given in the
CC exemplification of the present invention
XX
XX Sequence 20 BP; 7 A; 3 C; 8 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 4011 TGTGACCTTCCTCACTTGG 4030
DB 20 TGTGACCTTCCTCACTTGG 1
RESULT 100
ACC45165/c
ID ACC45165 standard; DNA; 20 BP.
XX
XX ACC45165;
XX
XX 16-JUN-2003 (first entry)
XX
XX Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:25.
XX
XX Human, cytostatic; neurotropic; neuroprotective; antiinflammatory;
XX antisense therapy; NAC; DEFCAP; hyperproliferative disease; apoptosis;
XX death effector filament-forming CED4-like apoptosis protein;
XX neurological disease; infection; inflammation; tumour formation;
XX phosphorothioate; ss.
XX
XX Homo sapiens.
OS
OS Synthetic.
```

```
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapper"
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapper"
XX
XX W02003024988-A1.
XX
XX 27-MAR-2003.
XX
XX 19-SEP-2002; 2002WO-US029664.
XX
XX 19-SEP-2001; 2001US-00956712.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Freier SM;
XX
XX WPI; 2003-354583/33.
XX
XX New antisense compounds, useful for modulating the expression of NAC or
PT for treating a disease or condition associated with the expression of
PT NAC, e.g. hyperproliferative disease or neurological disease.
XX
XX Claim 3; Page 75; 147pp; English.
XX
XX The present invention describes a compound (1) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule encoding NAC, where the compound
CC specifically hybridizes with the nucleic acid molecule encoding NAC and
CC inhibits the expression of NAC. The compound specifically hybridizes with
CC at least an 8-nucleobase portion of an active site on a nucleic acid
CC molecule encoding NAC. Also described: (1) a composition comprising (1)
CC and a pharmaceutical carrier or diluent; (2) inhibiting the expression of
CC NAC in cells or tissues comprising contacting the cells or tissues with
CC (1); and (3) treating an animal having a disease or condition associated
CC with NAC comprising administering (1) to the animal so that expression of
CC NAC is inhibited. (1) has cytostatic, neurotropic, neuroprotective and
CC antiinflammatory activities, and can be used in antisense therapy. The
CC antisense compound (1) are useful for modulating the expression of NAC,
CC and for treating a disease or condition associated with expression of
CC NAC, e.g. hyperproliferative disease, neurological disease, or a disease
CC or disorder arising from aberrant apoptosis. The compounds are also
CC useful as research reagents and kits, or for diagnostics, therapeutics
CC and prophylaxis, e.g. to prevent or delay infection, inflammation or
CC tumour formation. NAC is also known as a death effector filament-forming
CC CED4-like apoptosis protein (DEFCAP). NAC is located on human chromosome
CC 17p13. The present sequence represents a human NAC chimeric
CC phosphorothioate antisense oligonucleotide, which is given in the
CC exemplification of the present invention
XX
XX Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 961 CGCTGAGAGAAATCTCTGC 980
DB 20 CGCTGAGAGAAATCTCTGC 1
RESULT 101
ACC45177/c
ID ACC45177 standard; DNA; 20 BP.
```

XX AC AC45177;
 XX 16-JUN-2003 (first entry)
 DT XX Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:37.
 DE XX
 XX Human; cytostatic; neurotropic; neuroprotective; antiinflammatory;
 KW antisense therapy; NAC; DEPCAP; hyperproliferative disease; apoptosis;
 KW death effector filament-forming CED4-like apoptosis protein;
 KW neurological disease; infection; inflammation; tumour formation;
 KW phosphorothioate; ss.
 XX Homo sapiens.
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "phosphorothioate backbone"
 FT modified_base 1..5
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
 XX
 XX WO2003024988-A1.
 XX 27-MAR-2003.
 PD
 XX 19-SEP-2002; 2002WO-US029664.
 PF
 XX 19-SEP-2001; 2001US-00956712.
 PR
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Bennett CF, Freier SM;
 PI
 XX WPI; 2003-354583/33.
 DR
 XX
 XX New antisense compounds, useful for modulating the expression of NAC or
 PT for treating a disease or condition associated with the expression of
 PT NAC, e.g. hyperproliferative disease or neurological disease.
 PS
 XX Claim 3; Page 75; 147pp; English.

XX SQ Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
 Query Match 0.4%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 3177 TTGCCAGAGACTGAGACAGC 3196
 DB 20 TTGCCAGAGACTGAGACAGC 1
 RESULT 102
 ACC45186/C
 ID ACC45186 standard; DNA; 20 BP.
 XX
 XX ACC45186;
 AC
 XX 16-JUN-2003 (first entry)
 DT
 XX
 XX Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:46.
 DE
 XX Human; cytostatic; neurotropic; neuroprotective; antiinflammatory;
 KW antisense therapy; NAC; DEPCAP; hyperproliferative disease; apoptosis;
 KW death effector filament-forming CED4-like apoptosis protein;
 KW neurological disease; infection; inflammation; tumour formation;
 KW phosphorothioate; ss.
 XX Homo sapiens.
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "phosphorothioate backbone"
 FT modified_base 1..5
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
 XX
 XX WO2003024988-A1.
 XX 27-MAR-2003.
 PD
 XX 19-SEP-2002; 2002WO-US029664.
 PF
 XX 19-SEP-2001; 2001US-00956712.
 PR
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Bennett CF, Freier SM;
 PI
 XX WPI; 2003-354583/33.
 DR
 XX
 XX New antisense compounds, useful for modulating the expression of NAC or
 PT for treating a disease or condition associated with the expression of
 PT NAC, e.g. hyperproliferative disease or neurological disease.
 PS
 XX Example 15; Page 75; 147pp; English.

The present invention describes a compound (I) 8-50 nucleobases in length
 targeted to a nucleic acid molecule encoding NAC, where the compound
 specifically hybridises with the nucleic acid molecule encoding NAC and
 inhibits the expression of NAC. The compound specifically hybridises with
 at least an 8-nucleobase portion of an active site on a nucleic acid
 and a pharmaceutical carrier or diluent; (2) inhibiting the expression of
 NAC in cells or tissues comprising contacting the cells or tissues with
 (I); and (3) treating an animal having a disease or condition associated
 with NAC comprising administering (I) to the animal so that expression of
 NAC is inhibited. (I) has cytostatic, neurotropic, neuroprotective and
 antiinflammatory activities, and can be used in antisense therapy. The
 antisense compounds (I) are useful for modulating the expression of NAC,
 and for treating a disease or condition associated with expression of
 NAC, e.g. hyperproliferative disease, neurological disease, or a disease
 or disorder arising from aberrant apoptosis. The compounds are also
 useful as research reagents and kits, or for diagnostics, therapeutics
 and prophylaxis, e.g. to prevent or delay infection, inflammation or
 tumour formation. NAC is also known as a death effector filament-forming
 CED4-like apoptosis protein (DEPCAP). NAC is located on human chromosome
 17p13. The present sequence represents a human NAC chimeric
 phosphorothioate antisense oligonucleotide, which is given in the
 exemplification of the present invention

CC	(1); and (3) treating an animal having a disease or condition associated
CC	with NAC comprising administering (I) to the animal so that expression of
CC	NAC is inhibited; (1) has cytoprotective, neuroprotective and
CC	antiinflammatory activities, and can be used in antisense therapy. The
CC	antisense compounds (I) are useful for modulating the expression of NAC,
CC	and for treating a disease or condition associated with expression of
CC	NAC, e.g., hyperproliferative disease, neurological disease, or a disease
CC	or disorder arising from aberrant apoptosis. The compounds are also
CC	useful as research reagents and kits, or for diagnostics, therapeutics
CC	and prophylaxis, e.g., to prevent or delay infection, inflammation or
CC	tumour formation. NAC is also known as a death effector filament-forming
CC	CED4-like apoptosis protein (DEFCAP). NAC is located on human chromosome
CC	17p13. The present sequence represents a human NAC chimeric
CC	phosphorothioate antisense oligonucleotide, which is given in the
CC	exemplification of the present invention
CC	
SQ	Sequence 20 BP, 2 A, 6 C, 9 G, 3 T, 0 U, 0 Other;
OY	
Dd	Query Match 0.4%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 1.9e+02; Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY	3846 CGCGTGGCCCAACAGCGGTC 3865 Dd 20 CCGCTGGCCCAACAGCGGTC 1
RESULT 103	
ID	ACC45199/c
XX	ACC45199 standard; DNA; 20 BP.
XX	ACC45199;
DT	16-JUN-2003 (first entry)
XX	Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:59.
XX	Human, cytoprotective; neuroprotective; antiinflammatory; KW antisense therapy; NAC; DEFCAP; hyperproliferative disease; apoptosis; KW death effector filament-forming CED4-like apoptosis protein; KW neurological disease; infection; inflammation; tumour formation; KW phosphorothioate; ss.
XX	Homo sapiens.
OS	Synthetic.
XX	
FH	Key
FT	modified_base
FT	location/Qualifiers
FT	1..20
FT	/tag= a
FT	/mod_base= OTHER
FT	/note= "phosphorothioate backbone"
FT	modified_base
FT	1..5
FT	/tag= b
FT	/mod_base= OTHER
FT	/note= "2'-O-methoxyethyl (2'-MOE) gapmer"
FT	modified_base
FT	16..20
FT	/tag= c
FT	/mod_base= OTHER
FT	/note= "2'-O-methoxyethyl (2'-MOE) gapmer"
XX	
FN	WO2003024988-A1.
PD	27-MAR-2003.
XX	
PP	19-SEP-2002; 2002MO-US029664.
XX	
PR	19-SEP-2001; 2001US-00956712.
XX	
PA	(ISIS-) ISIS PHARM INC.
XX	
PI	Bennett CF, Freiler SM,
XX	
DR	WPI; 2003-354583/33.

PT	XX	New antisense compounds, useful for modulating the expression of NAC or for treating a disease or condition associated with the expression of NAC, e.g. hyperproliferative disease or neurological disease.
PS	XX	Example 15; Page 76; 147pp; English.
CC	XX	The present invention describes a compound (I) 8-50 nucleobases in length targeted to a nucleic acid molecule encoding NAC, where the compound specifically hybridizes with the nucleic acid molecule encoding NAC and inhibits the expression of NAC. The compound specifically hybridizes with at least an 8-nucleobase portion of an active site on a nucleic acid molecule encoding NAC. Also described: (1) a composition comprising (I) and a pharmaceutical carrier or diluent; (2) inhibiting the expression of NAC in cells or tissues comprising contacting the cells or tissues with (I); and (3) treating an animal having a disease or condition associated with NAC comprising administering (I) to the animal so that expression of NAC is inhibited. (I) has cytostatic, neurotropic, neuroprotective and antiinflammatory activities, and can be used in antisense therapy. The antisense compounds (I) are useful for modulating the expression of NAC, and for treating a disease or condition associated with expression of NAC, e.g. hyperproliferative disease, neurological disease, or a disease or disorder arising from aberrant apoptosis. The compounds are also useful as research reagents and kits, or for diagnostics, therapeutics and prophylaxis, e.g. to prevent or delay infection, inflammation or tumour formation. NAC is also known as a death effector filament-forming protein 1713. The present sequence represents a human NAC cDNA-like phosphorocholate antisense oligonucleotide, which is given in the exemplification of the present invention
CC	XX	Sequence 20 BP; 6 A; 9 C; 2 G; 3 T; 0 U; 0 Other;
CC	XX	Query Match 0.4%; Score 20; DB 1; Length 20;
CC	XX	Best Local Similarity 100.0%; Pred. No. 1.9e+02;
CC	XX	Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY	4575	GGTGGAGGTGTCTTGGACA 4574 20 GGTGGAGGTGTCTTGGACA 1
DB	20	GGTGGAGGTGTCTTGGACA 1
RESULT 104		
ADP11640/C		
ID	ADP11640	standard; DNA; 20 BP.
AC	ADP11640;	
XX		
DT	12-AUG-2004	(first entry)
XX		
DE	Tagman probe of the invention #333.	
XX		
KW	transplant rejection; immune system; rheumatoid arthritis; lupus; inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; probe.	
XX		
OS	Homo sapiens.	
XX		
PN	WO2004042346-A2.	
XX		
BD	21-MAY-2004.	
XX		
PF	24-APR-2003; 2003WO-US012946.	
XX		
PR	24-APR-2002; 2002US-00131831.	
XX		
PR	20-DEC-2002; 2002US-00325899.	
XX		
PA	(EXPR-) EXPRESSION DIAGNOSTICS INC.	
XX		
PI	Wohlgenuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M,	
XX	Rosenberg S;	
XX	WPI; 2004-400724/37.	
XX		

PT Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
 PT pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
 rejection, in an individual, comprises detecting the expression level of
 the genes.

PS Claim 58; SEQ ID NO 1649; 1762pp; English.

XX
 CC The present invention relates to diagnosing or monitoring transplant
 CC rejection, e.g. cardiac or kidney transplant rejection, in an individual
 CC comprising detecting the expression level of one or more genes. The
 CC methods, system and kits are useful in diagnosing or monitoring
 CC transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
 CC islet, lung, bone marrow or stem cell transplant rejection,
 CC xenotransplant rejection or mechanical organ replacement rejection, in an
 CC individual. The method is also useful in assessing the immune status of
 CC an individual. The methods are also useful in diagnosing and monitoring
 CC diseases that involve the immune system, e.g. rheumatoid arthritis,
 CC lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
 CC viral, bacterial or fungal infection. The present sequence represents a
 CC Tagman probe for a 50 mer oligonucleotide marker for diagnosis and
 CC monitoring of allograft rejection and other disorders.

XX
 SQ Sequence 20 BP; 2 A; 9 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4970 TGCCAGGATGCCACAGGGG 4989

DB 20 TGCCAGGATGCCACAGGGG 1

RESULT 105

ID ADP10980 standard; DNA; 20 BP.

AC ADP10980;

DT 12-AUG-2004 (first entry)

DE Set 1 left PCR primer for marker probe #325.

XX transplant rejection; immune system; rheumatoid arthritis; lupus;
 KM inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.

XX Homo sapiens.

OS WO2004042346-A2.

PN 21-MAY-2004.

PD 24-APR-2003; 2003WO-US012946.

PR 24-APR-2002; 2002US-00131831.

PR 20-DEC-2002; 2002US-00325899.

PA (EXPR-) EXPRESSION DIAGNOSTICS INC.

XX Wohlgemuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;
 PI Rosenberg S;

PI WPI; 2004-400724/37.

XX
 DR
 XX
 PT Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
 PT pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
 rejection, in an individual, comprises detecting the expression level of
 the genes.

XX Claim 58; SEQ ID NO 989; 1762pp; English.

XX The present invention relates to diagnosing or monitoring transplant
 CC rejection, e.g. cardiac or kidney transplant rejection, in an individual

CC comprises detecting the expression level of one or more genes. The
 CC methods, system and kits are useful in diagnosing or monitoring
 CC transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
 CC islet, lung, bone marrow or stem cell transplant rejection,
 CC xenotransplant rejection or mechanical organ replacement rejection, in an
 CC individual. The method is also useful in assessing the immune status of
 CC an individual. The methods are also useful in diagnosing and monitoring
 CC diseases that involve the immune system, e.g. rheumatoid arthritis,
 CC lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
 CC viral, bacterial or fungal infection. The present sequence represents a
 CC primer for a 50 mer oligonucleotide marker for diagnosis and monitoring
 CC of allograft rejection and other disorders.

XX
 SQ Sequence 20 BP; 2 A; 4 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4945 GCCTTGTGCGCATTTATGT 4964

DB 1 GCCTTGTGCGCATTTATGT 20

RESULT 106

ID ADP12136/c

AC ADP12136;

DT 12-AUG-2004 (first entry)

DE Set 2 right PCR primer for marker probe #242.

XX transplant rejection; immune system; rheumatoid arthritis; lupus;
 KM inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.

XX Homo sapiens.

PN WO2004042346-A2.

PD 21-MAY-2004.

PD 24-APR-2003; 2003WO-US012946.

PR 24-APR-2002; 2002US-00131831.

PR 20-DEC-2002; 2002US-00325899.

PA (EXPR-) EXPRESSION DIAGNOSTICS INC.

XX Wohlgemuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;
 PI Rosenberg S;

PI WPI; 2004-400724/37.

XX
 DR
 XX
 PT Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
 PT pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
 rejection, in an individual, comprises detecting the expression level of
 the genes.

XX Claim 58; SEQ ID NO 2145; 1762pp; English.

XX
 CC The present invention relates to diagnosing or monitoring transplant
 CC rejection, e.g. cardiac or kidney transplant rejection, in an individual
 CC comprising detecting the expression level of one or more genes. The
 CC methods, system and kits are useful in diagnosing or monitoring
 CC transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
 CC islet, lung, bone marrow or stem cell transplant rejection,
 CC xenotransplant rejection or mechanical organ replacement rejection, in an
 CC individual. The method is also useful in assessing the immune status of
 CC an individual. The methods are also useful in diagnosing and monitoring
 CC diseases that involve the immune system, e.g. rheumatoid arthritis,
 CC lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or

CC viral, bacterial or fungal infection. The present sequence represents a
CC primer for a 50 mer oligonucleotide marker for diagnosis and monitoring
CC of allograft rejection and other disorders.

XX Sequence 20 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4901 ATCTGTTGCTTCACGA 4920
Db 20 ATCTGTTGCTTCACGA 1

RESULT 107
ADP11311/c
ID ADP11311 standard; DNA; 20 BP.

XX ADP11311;

XX 12-AUG-2004 (first entry)

XX Set 1 right PCR primer for marker probe #325.

XX transplamt rejection; immune system; rheumatoid arthritis; lupus;
XX inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.

XX Homo sapiens.

XX MO2004042346-A2.

XX 21-MAY-2004.

XX 24-APR-2003; 2003WO-US012946.

XX 24-APR-2002; 2002US-00131831.

XX 20-DEC-2002; 2002US-00325899.

XX (EXPR-) EXPRESSION DIAGNOSTICS INC.

XX Wohlgemuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;
XX Rosenberg S;

XX WPI; 2004-400724/37.

XX Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
XX pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
XX rejection, in an individual, comprises detecting the expression level of
XX the gene.

XX Claim 58; SEQ ID NO 1320; 1762pp; English.

XX The present invention relates to diagnosing or monitoring transplant
XX rejection, e.g. cardiac or kidney transplant rejection, in an individual
XX comprises detecting the expression level of one or more genes. The
XX methods, system and kits are useful in diagnosing or monitoring
XX transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
XX islet, lung, bone marrow or stem cell transplant rejection,
XX xenotransplant rejection or mechanical organ replacement rejection, in an
XX individual. The method is also useful in assessing the immune status of
XX an individual. The methods are also useful in diagnosing and monitoring
XX diseases that involve the immune system, e.g. rheumatoid arthritis,
XX lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
XX viral, bacterial or fungal infection. The present sequence represents a
XX primer for a 50 mer oligonucleotide marker for diagnosis and monitoring
XX of allograft rejection and other disorders.

XX Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 5024 AATGTCATCTGAGCTGGC 5043
Db 20 AATGTCATCTGAGCTGGC 1

RESULT 108
ADP11888
ID ADP11888 standard; DNA; 20 BP.

XX ADP11888;

XX 12-AUG-2004 (first entry)

XX Set 2 left PCR primer for marker probe #240.

XX transplamt rejection; immune system; rheumatoid arthritis; lupus;
XX inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.

XX Homo sapiens.

XX MO2004042346-A2.

XX 21-MAY-2004.

XX 24-APR-2003; 2003WO-US012946.

XX 24-APR-2002; 2002US-00131831.

XX 20-DEC-2002; 2002US-00325899.

XX (EXPR-) EXPRESSION DIAGNOSTICS INC.

XX Wohlgemuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;
XX Rosenberg S;

XX WPI; 2004-400724/37.

XX Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
XX pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
XX rejection, in an individual, comprises detecting the expression level of
XX the gene.

XX Claim 58; SEQ ID NO 1897; 1762pp; English.

XX The present invention relates to diagnosing or monitoring transplant
XX rejection, e.g. cardiac or kidney transplant rejection, in an individual
XX comprises detecting the expression level of one or more genes. The
XX methods, system and kits are useful in diagnosing or monitoring
XX transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
XX islet, lung, bone marrow or stem cell transplant rejection,
XX xenotransplant rejection or mechanical organ replacement rejection, in an
XX individual. The method is also useful in assessing the immune status of
XX an individual. The methods are also useful in diagnosing and monitoring
XX diseases that involve the immune system, e.g. rheumatoid arthritis,
XX lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
XX viral, bacterial or fungal infection. The present sequence represents a
XX primer for a 50 mer oligonucleotide marker for diagnosis and monitoring
XX of allograft rejection and other disorders.

XX Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4825 AGCCCTTGACCTTGATCC 4844
Db 1 AGCCCTTGACCTTGATCC 20

RESULT 109
ACK28659
ID ACK28659 standard; DNA; 25 BP.

```

XX AC ACK28659;
XX
XX 14-OCT-2003 (first entry)
XX
XX DE Human microarray DNA oligonucleotide SEQ ID NO 128640.
XX
XX EST; ss; probe; expressed sequence tag; microarray; gene expression;
XX genetic variation; biallelic marker; polymorphism; human;
XX cross-species comparison.
XX
XX Homo sapiens.
XX
XX US2003104410-A1.
XX
XX 05-JUN-2003.
XX
XX 15-MAR-2002; 2002US-00098263.
XX
XX 16-MAR-2001; 2001US-0276759P.
XX
XX (AFEX-) AFFYMETRIX INC.
XX
XX Miltmann MP;
XX
XX MPI; 2003-567953/53.
XX
XX New array of nucleic acid probes, useful for in situ hybridization, in
XX Southern, Northern or dot-blot hybridization to identify or detect the
XX sequence or specific mutations of any gene.
XX
XX Claim 1; SEQ ID NO 128640; 9pp; English.
XX
XX The invention discloses a microarray comprising a plurality of nucleic
XX acid probes including one of 2, 018, 500 fully defined sequences, or its
XX perfect match, perfect mismatch, antisense match or antisense mismatch.
XX Also disclosed is a method of gene expression analysis. The array is used
XX in monitoring gene expression levels by hybridisation to a DNA library,
XX in analysis of genetic variation or in hybridisation of tag-labelled
XX compounds. The nucleic acid probes are specifically designed for analysis
XX of at least one target sequence. The method of analysis comprises
XX hybridising at least one or more nucleic acids to at least two or more
XX nucleic acid probes and detecting the hybridisation. The nucleic acid
XX probes are attached to a solid support. The analysis comprises monitoring
XX gene expression levels, identifying biallelic markers or polymorphisms,
XX or family members of a gene and a cross-species comparison. Each of the
XX nucleic acids further comprises a tag sequence. The array of nucleic acid
XX probes is useful in in situ hybridisation, in Southern, Northern or dot-
XX blot hybridisation to identify or detect the sequence or specific
XX mutations of any gene, in mapping the 5' termini of mRNA molecules by
XX primer extensions or in screening cDNA or genomic libraries or subclones
XX for additional subclones containing segments of DNA that have been
XX isolated and previously sequenced. The sequence presented is one of the
XX nucleic acid probes incorporated in the microarray. Note: The sequence
XX data for this patent can also be obtained in electronic format directly
XX from USPTO at seqdata.uspto.gov/sequence.html
XX
XX Sequence 25 BP; 8 A; 6 C; 7 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 19.8; DB 1; Length 25;
XX Best Local Similarity 91.3%; Pred. No. 2.1e+02;
XX Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 3444 GGAGCAGAGAAACTCAGCTGC 3466
XX |||||||
XX 3 GGAGCAGAGAACTCTCAGCTAC 25
XX
XX RESULT 110
XX AAH91641/C
XX ID AAH91641 standard; DNA; 28 BP.
XX
XX AAH91641;
XX AC

```

```

XX DT 09-OCT-2001 (first entry)
XX
XX DE Human inflammatory bowel disease associated polymorphic site #716.
XX
XX Human; inflammatory bowel disease; Crohn's disease; ulcerative colitis;
XX single nucleotide polymorphism; SNP; chromosome 19p13; paternity test;
XX chromosome 5q31-33; forensic test; gene therapy; db.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX misc_feature 16
XX FT /*tag= a
XX FT /note= "SNP, optionally insertion or deletion at this
XX FT position"
XX
XX PN WO200142511-A2.
XX
XX 14-JUN-2001.
XX
XX 11-DEC-2000; 2000WO-US033632.
XX
XX 10-DEC-1999; 99US-0170257P.
XX
XX 10-APR-2000; 2000US-0196046P.
XX
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX PA (ELIT-) ELIPISS BIOTHERAPEUTICS CORP.
XX
XX Daly M, Hudson TV, Lander ES, Rioux J, Siminovitch K;
XX
XX MPI; 2001-367874/38.
XX
XX Testing for the presence of polymorphisms associated with inflammatory
XX bowel disease, using a hybridization assay.
XX
XX Claim 1; Page 69; 463pp; English.
XX
XX The present invention describes a method for detecting the presence of
XX polymorphisms associated with inflammatory bowel diseases such as
XX ulcerative colitis and Crohn's disease. The methods can be used to detect
XX the presence of genetic polymorphisms associated with inflammatory bowel
XX disease and correlating their occurrence with disease states. They may be
XX used in this way for phenotypic correlations, forensic, paternity
XX testing, medicine and genetic analysis. The present sequence is a
XX polymorphic site described in the exemplification of the invention
XX
XX Sequence 28 BP; 3 A; 9 C; 2 G; 13 T; 0 U; 1 Other;
XX
XX Query Match 0.4%; Score 19.8; DB 1; Length 28;
XX Best Local Similarity 87.5%; Pred. No. 2.2e+02;
XX Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1177 ATCAGAGAGAGAGAGAGAGAAA 1200
XX |||||||
XX 26 ATCAGAGAGAGAGAGAGAGAGA 3
XX
XX RESULT 111
XX AAAS7855
XX ID AAAS7855 standard; DNA; 28 BP.
XX
XX AAAS7855;
XX
XX 11-OCT-2000 (first entry)
XX
XX Deoxy-A22-tagged substrate oligonucleotide.
XX
XX Ribozyme; catalytic RNA; analyte detection; effector molecule;
XX nucleic acid substrate; in vitro selection; ribozyme ligase;
XX conformation dependent activity; allosteric activation; ss.
XX
XX Synthetic.
XX
XX OS

```

```

XX Key Location/Qualifiers
FH m1sc_RNA 23..28
FT /tag= a
FT m1sc_binding 24..28
FT /tag= b
FT /bound_molety= "Bases 13-17 of N90 RNA pool (AA57851)"
XX
XX MO200024931-A2.
XX
XX 04-MAY-2000.
XX
XX 22-OCT-1999; 99MO-IL000557.
XX
XX 23-OCT-1998; 98II-00126731.
XX
XX (INTE-) INTELIGENE LTD.
XX
XX Nathan A, Ellington A;
XX
XX WPI; 2000-350763/30.
XX
XX Detecting an analyte in a sample comprises providing nucleic acid
XX sequence which is catalytically active in presence of analyte, contacting
XX catalytic nucleic acid with substrate and amplifying catalytic product.
XX
XX Disclosure; Page; 36pp; English.
XX
XX The invention relates to a method of detecting an analyte in a sample.
XX The method comprises providing a nucleic acid sequence which is initially
XX catalytically inactive, but which becomes catalytically active in the
XX presence of an analyte (the effector); providing a nucleic acid substrate
XX for the catalytic activity of the nucleic acid sequence; and contacting
XX the nucleic acid sequence and the substrate with the sample under
XX conditions allowing catalytic activity of nucleic acid sequences. The
XX catalytic nucleic acid sequence will be able to convert the nucleic acid
XX substrate into a nucleic acid product only if the analyte of interest is
XX present. The nucleic acid catalytic product is then amplified, and a
XX significant increase in the amount of product indicates the presence of
XX the analyte in the sample. The method is useful for the qualitative or
XX quantitative determination of an analyte in a sample in diagnostic
XX assays. The invention describes the in vitro selection of a ribozyme
XX ligase (L1; AA57859, AA57860) which is catalytically active only in the
XX presence of an oligonucleotide effector (AA57854). The L1 ribozyme
XX ligase was selected from a pool of RNA molecules comprising a central
XX randomised region 90 nucleotides in length flanked on both sides by
XX constant sequence regions (the N90 RNA pool; AA57851). In the presence
XX of the effector, selection was performed using one of the tagged
XX substrate molecules AA57855-AA57857. RNAs with ligase activity (i.e.,
XX those which have become ligated to the substrate molecule) were reverse
XX transcribed using the effector oligo, and then PCR amplified using the
XX effector and a DNA primer identical in sequence to the substrate used for
XX the selection. A ribozyme ligase, L1, was selected via this procedure. L1
XX can only adopt its active conformation (AA57859) in the presence of the
XX effector oligo (analyte). In the absence of the effector, L1 adopts an
XX inactive conformation (AA57860). The present sequence represents the
XX deoxy-A22-tagged substrate oligonucleotide. The dA22 tag enables
XX successfully ligated products to be isolated using oligo (dT)12-18
XX cellulose. Note: The present sequence is not given in the specification,
XX but is created from the information given on page 11
XX
XX Sequence 28 BP; 23 A; 2 C; 1 G; 0 T; 2 U; 0 Other;
XX
XX Query Match 0.4%; Score 19.6; DB 1; Length 28;
XX Best Local Similarity 80.8%; Pred. No. 2.3e+02;
XX Matches 21; Conservative 1; Mismatches 4; Indels 0; Gaps 0;
XX
XX 5394 AAAAAATACAAAAAGAAAAATGAA 5419
XX ||||| ||||| ||||| |||||
XX 1 AAAAAAAAAAAAAAAAAAAAAAUGCA 26
XX
XX RESULT 112

```

```

AAL43065
XX ID AAL43065 standard; RNA; 28 BP.
XX
XX AC AAL43065;
XX
XX 25-SEP-2002 (first entry)
XX
XX DE Regulatable, catalytically active nucleic acid substrate #1.
XX
XX KW Regulatable catalytically active nucleic acid; RCANA; ribozyme;
XX gene therapy; ss.
XX
XX OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1
FT /tag= a
FT /mod_base= OTHER
FT /note= "5' biotinylated"
XX
XX MO200196559-A2.
XX
XX 20-DEC-2001.
XX
XX 14-JUN-2001; 2001MO-US019302.
XX
XX 15-JUN-2000; 2000US-0212097P.
XX
XX (TEXA ) UNIV TEXAS SYSTEM.
XX
XX Ellington AD, Hesselberth J, Marshall K, Robertson M, Sooter L;
XX Davidson E, Cox JC, Reidel T;
XX
XX WPI; 2002-122216/16.
XX
XX New regulatable, catalytically active nucleic acids (RCANA), useful in
XX gene therapy (particularly for regulating gene expression), or in assays
XX for detecting the presence of ligands or activation of an effector of
XX RCANA.
XX
XX Example 6; Page 75; 126pp; English.
XX
XX The present invention relates to regulatable, catalytically active
XX nucleic acids (RCANA) which are regulated by polypeptides. These are
XX useful for regulating gene expression in assays for detecting the
XX presence of ligands, for activation of an effector of RCANA, and in gene
XX therapy. The present sequence is an oligonucleotide substrate used in the
XX construction of an RCANA
XX
XX Sequence 28 BP; 23 A; 2 C; 1 G; 0 T; 2 U; 0 Other;
XX
XX Query Match 0.4%; Score 19.6; DB 1; Length 28;
XX Best Local Similarity 80.8%; Pred. No. 2.3e+02;
XX Matches 21; Conservative 1; Mismatches 4; Indels 0; Gaps 0;
XX
XX 5394 AAAAAATACAAAAAGAAAAATGAA 5419
XX ||||| ||||| ||||| |||||
XX 1 AAAAAAAAAAAAAAAAAAAAAAUGCA 26
XX
XX RESULT 113
XX ADA39569
XX ID ADA39569 standard; RNA; 28 BP.
XX
XX AC ADA39569;
XX
XX 20-NOV-2003 (first entry)
XX
XX DE Substrate RNA related oligonucleotide SEQ ID NO:25.
XX
XX KW regulatable catalytically active nucleic acid; RCANA; catalytic domain;
XX regulation; screening; gene therapy; biological pathway regulation;
XX regulatory element; metabolic pathway; ribozyme; ss.
XX
XX RESULT 112

```

XX	Synthetic.
OS	
XX	WO2003027310-A2.
PN	
XX	
XX	03-APR-2003.
PD	
XX	
PF	24-SEP-2002; 2002WO-US030458.
XX	
XX	24-SEP-2001; 2001US-0324715P.
PR	
XX	
XX	(ARCH-) ARCHEMIX CORP.
PA	
XX	
XX	Wilson C, Cload ST, Keefe AD;
PI	
XX	
DR	WPI; 2003-354657/33.
XX	
XX	
PT	Regulating production of a product in a cell, comprises inserting a
PT	regulatable catalytically active nucleic acid into a gene that produces
PT	the product or regulates the production of the product in the cell.
XX	
XX	
SS	Example 6; Page 76; 128pp; English.

```

CC The present invention describes a method for regulating production of a
CC product in a cell. The method comprises inserting a regulatable
CC catalytically active nucleic acid (RCANA) into a gene that produces the
CC product or regulates the production of the product in the cell, where the
CC RCANA comprises a catalytic domain which modifies a transcript to alter
CC its coding potential and a regulatory domain that recognises an effector
CC that alters the function of the catalytic domain, and contacting the
CC regulatory domain with an effector to regulate production of the product.
CC Also described: (1) regulating a biological pathway in cell; and (2)
CC screening a population of cells for a cell that produces a bioproduct.
CC The methods are useful for regulating a biological pathway in cell, or
CC regulating production of a product in a cell. The RCANAs are useful as
CC regulatory elements to control the expression of genes in a metabolic
CC pathway, or as regulated selectable markers to increase a selective
CC pressure favouring or disfavouring production of a targeted bioproduct.
CC The RCANAs are also useful for in vitro or in vivo sensing or detection,
CC and in gene therapy. The present sequence represents an RNA substrate
CC oligonucleotide, which is used in an example from the present invention.
CC
XX
SQ Sequence 28 BP; 23 A; 2 C; 1 G; 0 T; 2 U; 0 Other;
Query Match 0.4%; Score 19.6; DB 1; Length 28;
Best Local Similarity 80.8%; Pred. No. 2.3e+02;
Matches 21; Conservative 1; Mismatches 4; Indels 0; Gaps 0;
Dy 5394 AAAAATTCAGAAAAAGAAAAATGAA 5419
Db 1 AAAAAAAAAAAAAAAAAAAAAAUAUGCA 26
RESULT 114
ADQ96960
ADQ96960 standard; DNA; 28 BP.
XX
XX ADQ96960;
XX
DT 23-SEP-2004 (first entry)
XX
XX Ribozyme substrate oligonucleotide 528A.
XX
XX RCANA; catalytically active regulatable nucleic acid; ss; ribozyme;
XX aptamer; effector domain; nucleic acid catalyst domain; gene therapy;
XX industrial biosyntheses; bioremediation; Ribosomal L1 ligase.
XX
XX Unidentified.
XX
XX US2004126682-A1.
XX
XX 01-JUL-2004.
XX

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PF 24-SEP-2002; 2002US-00254566.
XX
PR 15-JUN-2000; 2000US-0212097F.
PR 14-SEP-2000; 2000US-00661658.
PR 20-SEP-2000; 2000US-00666870.
PR 14-JUN-2001; 2001US-00883119.
PR 24-SEP-2001; 2001US-0324715F.
XX
PA (ELLI/) ELLINGTON A D.
PA (HESS/) HESSELBERTH J.
PA (THOM/) THOMPSON K.
PA (ROBE/) ROBERTSON M P.
PA (SOOT/) SOOTER L.
PA (DAVI/) DAVIDSON E.
PA (COXJ/) COX J C.
PA (RIED/) RIEDEL T.
PA (WILS/) WILSON C.
PA (CLOA/) CLOUD S T.
PA (KEEF/) KEEFE A D.
XX
PI Ellington AD, Hesselberth J, Thompson K, Robertson MP, Sooter L;
PI Davidson E, Cox JC, Riedel T, Wilson C, Cloud ST, Keefe AD;
XX
XX WPI; 2004-560517/54.
XX
XX Novel regulatable, catalytically active nucleic acid comprising effector
XX PT domain, and catalyst domain which comprises randomized catalytic residues
XX PT and is regulated by effector that interacts with effector domain.
XX
XX Example 6; SEQ ID NO 25; 78bp; English.
XX

```

The invention relates to a regulatable, catalytically active nucleic acid (RCNA), segment comprising an effector domain and a nucleic acid catalyst domain in which one or more critical catalytic residues of the nucleic acid catalyst have been randomised, where the kinetic parameters of the catalytic domain are regulated by an effector that interacts with the effector domain. Also included are a nucleic acid comprising a gene, a RCNA inserted within the gene (where the presence of an effector causes the nucleic acid to catalyse a reaction), isolating an RCNA (comprising a catalytic and an effector domain involving randomising at least one nucleotide in the catalytic domain of a catalytically active nucleic acid) to create a nucleic acid pool, removing from the nucleic acid pool those nucleic acids that interact with the catalytic target of the catalytic domain, adding an effector molecule to the nucleic acids and isolating those nucleic acids that interact with the catalytic target of the catalytic domain), detection of a target using a RCNA, modifying a target using a RCNA (involving providing a RCNA capable of target-specific modification and modifying the target under conditions that cause a RCNA-specific activity), selecting an RCNA and detecting an RCNA (involving isolating an RCNA, creating a construct in which the nucleic acid is in position to regulate the expression of a reporter gene, introducing the construct into a host cell and measuring the catalytic activity of the nucleic acid upon exposure of the host cell to the effector. The RCNA is useful for regulating production of a product in a cell (by gene therapy) which involves inserting into a gene that produces the product or regulates the production of the product in the cell an RCNA which comprises a catalytic domain, that modifies a transcript to alter its coding potential, and a regulatory domain which recognises an effector that alters the function of the catalytic domain, contacting the regulatory domain with an effector thereby regulating production of the product. The concentration of the effector modulates the activity of the catalytic domain of the RCNA. The production of the product is fully inhibited or is increased compared to a normal control level, or is partially inhibited according to the concentration of the effector. The RCNA blocks or activates expression of the gene. The effector is the product, where it accesses feedback inhibitor of the gene. The product is produced in a metabolic pathway that is being regulated, and the effector or the product is an intermediate in a metabolic pathway. The effector is endogenous or exogenous to the cell. The effector is an end product of a biosynthetic process. The effector or the product is chosen from protein, enzyme, protein pharmaceutical, metabolite, drug, dye, vitamin, food additive, chemical additive, pesticide, insecticide, feed compound, and a waste product. The drug is

CC chosen from antibiotics, anticancer drugs, antifungals, cholesterol-
 CC lowering drugs, and immunosuppressants. The RCANA is useful for
 CC regulating a biological pathway in a cell, for screening a population of
 CC cells for a cell that produces a bioproduct, for modulating expression of
 CC a nucleic acid, in gene therapy applications, and for facilitating
 CC industrial biotechnology and bioremediation. The present sequence is an
 CC RNA substrate molecule for an RCANA containing the catalytic region of
 CC ribosomal L1 ligase.

XX Sequence 28 BP; 23 A; 2 C; 1 G; 0 T; 2 U; 0 Other;

Query Match 0.4%; Score 19.6; DB 1; Length 28;

Best Local Similarity 80.8%; Pred. No. 2.3e+02;

Matches 21; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 5394 AAAAATACAAAAGAAAATGAA 5419
 DB 1 AAAAAAAAAAAAAAAAAAUGCA 26

RESULT 115

ADFL2405 ADFL2405 standard; DNA; 24 BP.

AC ADFL2405;

XX 12-FEB-2004 (first entry)

DE L1 retrotransposon insertion characterisation primer seq id 151.

XX gene therapy; insertional mutation; germ line specific promoter;

KM mutation generation; transgenic animal; poly A element; non-LTR;

KM retrotransposon; long terminal repeats; human; primer; ss.

OS Homo sapiens.

XX US2003121063-A1.

XX 26-JUN-2003.

XX 09-AUG-2002; 2002US-00216122.

PR 16-NOV-1995; 95US-0006831P.

PR 15-NOV-1996; 96US-00749805.

PR 28-APR-1997; 97US-00847844.

PR 01-SEP-2000; 2000US-00653812.

XX (UYPR-) UNIV PENNSYLVANIA.

XX Kazarian HH, Ostertag E, Deberardinis R;

XX WPI; 2003-863454/80.

XX Example 4; SEQ ID NO 151; 102pp; English.

CC The invention describes a method of creating an insertional mutation in
 CC the germ line of an animal by introducing into an animal a nucleic acid
 CC molecule comprising a germ line specific promoter. The method is useful
 CC for generating a mutation in an offspring of an animal, or for isolating
 CC a nucleic acid from a genome of an offspring of an animal. The method may
 CC also be used to correct genetic defects in animals, especially humans.
 CC The nucleic acid is useful for generating mutations in a cell for
 CC assessing the frequency with which selected cells under go insertional
 CC mutagenesis for the generation of transgenic animals. This sequence
 CC represents a primer used to characterize the insertion site of the
 CC L1/enhanced green fluorescent protein (EGFP) retrotransposon cassette
 CC into the mouse genome.

SQ Sequence 24 BP; 23 A; 0 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 19.2; DB 1; Length 24;

Best Local Similarity 87.5%; Pred. No. 2.6e+02;

Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAATACAAAAGAAAAT 5416
 DB 1 AAAAAAAAAAAAAAAAAAAT 24

RESULT 116

AAV42215/C AAV42215 standard; DNA; 25 BP.

XX AAV42215;

XX 16-OCT-1998 (first entry)

DE Sequencing primer used to exemplify the invention.

XX Incyte clone 1; fluorescent label; probe; primer; DNA sequencing; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 1 /tag= a

FT modified_base 7 /note= "labelled with the donor carboxyfluorescein"

FT modified_base 14 /tag= b

FT modified_base 17 /note= "optionally labelled with the acceptor 6-

FT modified_base 17 /note= "optionally labelled with the acceptor 6-

FT modified_base 17 /tag= a

FT modified_base 17 /note= "optionally labelled with the donor

FT modified_base 17 /tag= b

FT modified_base 17 /note= "optionally labelled with the acceptor 6-

PN WO9831834-A1.

XX 23-JUL-1998.

PR 12-DEC-1997; 97WO-US022914.

PR 15-JAN-1997; 97US-00784162.

PA (INCYT) INCYTE PHARM INC.

XX Ju J;

XX WPI; 1998-414127/35.

CC Set of energy-transfer fluorescent labels with donor and acceptor at
 CC different separations - useful for DNA sequencing allows use of fewer
 CC analysing wavelengths or an increased throughput.

XX Example 1; Page 14; 30pp; English.

CC The present sequence exemplified the primer of the invention, and is
 CC used to sequence Incyte clone 1 (AAV4237). The primer of the invention
 CC is labelled with a set of at least 2 different fluorescent labels. The
 CC set comprises an energy-transfer fluorescent label with at least 1 each
 CC of a donor fluorophore and an acceptor fluorophore capable of energy
 CC transfer, and separated by a distance x, and a second similar fluorescent
 CC label in which the separation distance is y, x and y being sufficiently

CC different for the two fluorescent labels to produce distinct fluorescent
CC signals. Fluorescent labels are useful in multicomponent analyses, e.g.
CC as probes for fluorescent in situ hybridisation or especially as primers
CC for DNA sequencing

XX Sequence 25 BP; 1 A; 1 C; 0 G; 23 T; 0 U; 0 Other;

Query Match 0.4%; Score 19.2; DB 1; Length 25;
Best Local Similarity 87.5%; Pred. No. 2.6e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5392 TAAAAAATTCAGAAAAAGAAAAA 5415
DB 24 TAAAAAATTCAGAAAAAGAAAAA 1

RESULT 117
AAK84259/c
ID AAK84259 standard; DNA; 25 BP.

XX AAK84259;

DT 08-SEP-1999 (first entry)

DE PCR primer for human Nck associated protein 1 coding sequence.

XX Nck associated protein 1; Nap1; human; apoptosis; Alzheimer's disease;
XX therapy; PCR primer; ss.

OS Synthetic.

OS Homo sapiens.

PN WO9311239-A1.

PD 24-JUN-1999.

PF 14-DEC-1998; 98WO-JP005646.

PR 15-DEC-1997; 97JP-00363183.

PA (KYOW) KYOMA HAKKO KOGYO KK.
(SAKA/) SAKAKI Y.

PI Sakaki Y;

DR WPI; 1999-395181/33.

PT Protein inhibiting apoptosis, useful in the diagnosis and treatment of
PT Alzheimer's disease.

PS Disclosure; Page 76; 90pp; Japanese.

CC This sequence represents a PCR primer used to isolate DNA encoding the
CC human Nck associated protein 1 (Nap1) of the invention. Nap1 inhibits
CC apoptosis. The protein can be used in the investigation, diagnosis and
CC treatment (e.g. by gene therapy) of Alzheimer's disease

XX Sequence 25 BP; 1 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.4%; Score 19.2; DB 1; Length 25;
Best Local Similarity 87.5%; Pred. No. 2.6e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5392 TAAAAAATTCAGAAAAAGAAAAA 5415
DB 25 TAAAAAATTCAGAAAAAGAAAAA 2

RESULT 118
AAT32790/c
ID AAT32790 standard; DNA; 26 BP.

XX AAT32790;

XX 18-FEB-1997 (first entry)

DT Triple helix-forming oligonucleotide for purifying plasmid pXL2726.

DE Triple helix; triplex formation; Hoogsteen base pairing; plasmid;

XX purification; double-stranded DNA; homopyrimidine; polypurine; pXL2726;

XX ss.

OS Synthetic.

PN WO9618744-A2.

PD 20-JUN-1996.

PF 08-NOV-1995; 95WO-FR001468.

PR 16-DEC-1994; 94FR-00015162.

PA (RHON) RHONE POULENC RORER SA.
Crouzet J, Scherman D, Wils P;

DR WPI; 1996-300660/30.

PT Purificn. of double stranded DNA by triple helix formation - comprises
PT hybridising immobilised oligo-nucleotide to specific sequence in target
PT DNA.

XX Example 7; Page 18; 34pp; French.

CC Double-stranded (ds) DNA can be purified from complex mixtures of nucleic
CC acids, proteins, endotoxins, nucleases, etc. by passing the mixture over
CC a support to which an oligonucleotide is covalently attached; the
CC oligonucleotide is able to form a triple helix by hybridisation with a
CC specific sequence present in the dsDNA. The method is particularly suited
CC to purification of plasmid DNA. In an example, the present
CC oligonucleotide was used for purifying plasmid pXL2726 (especially
CC constructed by inserting a linker comprising a (GA)25 homopurine sequence
CC into the BamHI and EcoRI sites of pBKs+)

XX Sequence 26 BP; 1 A; 11 C; 2 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 19.2; DB 1; Length 26;
Best Local Similarity 87.5%; Pred. No. 2.6e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1180 AGAGAAAGAGAGAGAGAAATCA 1203
DB 26 AGAGAGAGAGAGAGAGAGAGACA 3

RESULT 119
AAT32778/c
ID AAT32778 standard; DNA; 26 BP.

XX AAT32778;

DT 18-FEB-1997 (first entry)

DE Triple helix-forming oligonucleotide.

XX Triple helix; triplex formation; Hoogsteen base pairing; plasmid;

XX purification; double-stranded DNA; homopyrimidine; polypurine; ss.

OS Synthetic.

PN WO9618744-A2.

PD 20-JUN-1996.

PF 08-NOV-1995; 95WO-FR001468.


```
PR 16-DEC-1994; 94FR-00015162.
XX
XX (RHON ) RHONE POULENC ROBER SA.
XX
XX Crouzet J, Scherman D, Wile P;
XX
XX WPI; 1996-300660/30.
XX
XX Purificn. of double stranded DNA by triple helix formation - comprises
PT hybridizing immobilised oligo-nucleotide to specific sequence in target
PT DNA.
XX
XX Claim 13; Page 26; 34pp; French.
XX
XX Double-stranded (ds) DNA can be purified from complex mixtures of nucleic
CC acids, proteins, endotoxins, nucleases, etc. by passing the mixture over
CC a support to which an oligonucleotide is covalently attached; the
CC oligonucleotide is able to form a triple helix by hybridisation with a
CC specific sequence present in the dsDNA. The present sequence is a
CC preferred oligonucleotide which can form a triple-helix with the
CC homopurine target sequence (CA)25. The target sequence may be present
CC naturally, e.g. in a plasmid origin of replication, or can be introduced
CC artificially. The method is particularly suited to purification of
CC plasmid DNA
XX
XX Sequence 26 BP; 1 A; 11 C; 2 G; 12 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 19.2; DB 1; Length 26;
Best Local Similarity 87.5%; Pred. No. 2.6e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1180 AGAGAAAGAGAGAGAGAAATCA 1203
Db 26 AGAGAGAGAGAGAGAGAGAGACA 3
RESULT 120
AAD03682/C
ID AAD03682 standard; DNA; 26 BP.
XX
XX AAD03682;
AC
XX
XX 19-JUN-2001 (first entry)
DT
XX
XX Human full length zcytor13 cDNA isolating polyA PCR primer, ZC7764b.
DE
XX
XX Human; phosphodiesterase; PDE; zcytor13; antiasthmatic; antiarthritic;
XX antioboratic; cytosatic; antiatherosclerotic; antiinfectility;
XX cardiant; antiinflammatory; dermatological; wound healing; antiviral;
XX antibacterial; therapy; inflammatory bowel disease; diverticulitis;
XX spermatogenesis; sperm capacitation; immunocntrreceptive; vaccine;
XX cancer; reperfusion ischaemia; psoriasis; melanoma; myocarditis; PID;
XX pelvic inflammatory disease; eczema; scleroderma; vasoconstriction;
XX heart arrhythmia; congestive heart disease; muscle spasm; fatigue;
XX chromosomal abnormality; gene therapy; PCR primer; ss.
XX
XX Homo sapiens.
OS
XX
XX W020012544-A2.
XX
XX 12-APR-2001.
XX
XX 06-OCT-2000; 2000MO-US027734.
XX
XX 07-OCT-1999; 99US-00414025.
XX
XX (ZYMO ) ZYMOGENETICS INC.
XX
XX Presnell SR, Novak JE, Gao Z;
XX
XX WPI; 2001-266312/27.
XX
XX Novel human phosphodiesterase polypeptide, zcytor13 and polynucleotide
```

```
PT encoding it, for detecting human chromosomal abnormalities, identifying
PT modulators and treating inflammatory and cardiovascular diseases.
XX
XX Example 1C; Page 118; 122pp; English.
XX
XX The patent discloses novel human phosphodiesterase (PDE), zcytor13 cDNA
CC and its corresponding protein. Zcytor13 protein is used to promote wound
CC healing in tissues, to exhibit anti-bacterial and anti-viral effects and
CC to identify modulators (e.g. agonists or antagonists). Zcytor13, its
CC agonists or antagonists are useful in the treatment of inflammatory heart
CC or cardiovascular conditions, muscle inflammation, inflammation during
CC and after surgery, arthritis, asthma, inflammation, bowel disease or
CC diverticulitis, for modulating spermatogenesis, sperm capacitation, as
CC immunocntrreceptive or anti-fertility vaccine and for treating male
CC infertility. Zcytor13 protein and its antibodies are used to diagnose
CC cancer, reperfusion ischaemia, asthma, psoriasis and melanoma. Zcytor13
CC proteins are used to enhance fertilisation. Zcytor13 antagonists are used
CC to treat myocarditis, atherosclerosis, pelvic inflammatory disease (PID),
CC psoriasis, eczema, scleroderma and other inflammatory diseases. Zcytor13
CC sequences and/or its antibodies are useful for treatment of disorders
CC associated with vasoconstriction, heart arrhythmia, congestive heart
CC disease, muscle spasm and fatigue. They are used for detecting human
CC chromosomal abnormalities. Zcytor13 cDNAs are used in gene therapy.
CC Zcytor13-cytokine fusion proteins or antibody-cytokine fusion proteins
CC are useful for enhancing in vivo killing of target tissue. The present
CC sequence is a polyA PCR primer, ZC7764b which is used to isolate full
CC length zcytor13 cDNA by screening human placental cDNA library
XX
XX Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 19.2; DB 1; Length 26;
Best Local Similarity 87.5%; Pred. No. 2.6e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5392 TAAAAAATGCAGAAAAAGAAAAA 5415
Db 26 TAAAAAATGCAGAAAAAGAAAAA 3
RESULT 121
AAS20596/C
ID AAS20596 standard; DNA; 26 BP.
XX
XX AAS20596;
AC
XX
XX 23-APR-2002 (first entry)
DT
XX
XX Human zsig63 cDNA sequencing primer ZC7764a.
DE
XX
XX Human; zsig63; chromosome 4q12-q13; salivary protein; antimicrobial; ss;
XX microbial infection; tooth decay; periodontal disease; thrush; emphysema;
XX gastrointestinal disease; urinary tract infection; vaginal infection;
XX skin infection; epithelial wound; chronic tissue damage; cystic fibrosis;
XX acquired immunodeficiency syndrome; AIDS; lung infection; sarcoidosis;
XX chronic bronchitis; gene therapy; protein therapy; primer; ZC7764a.
XX
XX Homo sapiens.
OS
XX
XX US6331413-B1.
XX
XX 18-DEC-2001.
XX
XX 17-MAR-2000; 2000US-00527345.
XX
XX 17-MAR-1999; 99US-0124820P.
XX
XX (ZYMO ) ZYMOGENETICS INC.
XX
XX Adler DA, Sheppard FO;
XX
XX WPI; 2002-096707/13.
XX
XX Polynucleotides encoding salivary proteins useful as anti-microbial
```

```
PT agents.
XX
XX Example 1; Col 53; 29pp; English.
XX
CC The invention relates to a polynucleotide derived from the 4q12-4q13
CC region of human chromosome 4 and encoding a zsig63 polypeptide, a
CC secreted salivary protein with anti-microbial activity. Due to their
CC microbical activity, the sequences can be used in the study of microbial
CC infections, e.g. for recombinant production of anti-microbial proteins.
CC The sequences can be used in the treatment of tooth decay, periodontal
CC disease, thrush, gastrointestinal disease, urinary tract infections,
CC vaginal infections, skin infections, epithelial wounds, chronic tissue
CC damage, acquired immunodeficiency syndrome (AIDS), cystic fibrosis, lung
CC infections, sarcoidosis, emphysema and chronic bronchitis. This sequence
CC represents a sequencing primer for cDNA encoding human zsig63
XX
SQ Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
XX
Query Match 0.4%; Score 19.2; DB 1; Length 26;
Best Local Similarity 87.5%; Pred. No. 2.6e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5392 TAAAAAATACAAAAAGAAAAA 5415
Db 26 TAAAAAATACAAAAAGAAAAA 3
XX
RESULT 122
AAS19344/c
ID AAS19344 standard; DNA; 26 BP.
XX
AC AAS19344;
XX
DT 20-MAR-2002 (first entry)
XX
DE Oligonucleotide sequence used to purify plasmid XL2726.
XX
KW ss; DNA purification; triple helix; plasmid purification; XL2726.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT repeat_region 5..26
FT repeat_unit /tag= a
FT /rpt_type= TANDEM
FT 5..6
FT /tag= b
FT /note= "CT repeat type"
XX
XX WO200192511-A2.
XX
XX 06-DEC-2001.
XX
XX 25-MAY-2001; 2001WO-US017122.
XX
XX 26-MAY-2000; 2000US-00580923.
XX
XX (AVET ) AVENTIS PHARMA SA.
XX
XX Crouzet J, Scherman D, Wils P, Blanche F, Cameron B;
XX
XX WPI; 2002-097772/13.
XX
XX Purifying double-stranded (ds) DNA from a solution containing dsDNA and
XX other components, comprises passing the solution through a support
XX comprising a covalently coupled oligonucleotide able to form a triple
XX helix with the dsDNA.
XX
XX Example 7.2; Page 20; 40pp; English.
XX
XX This invention comprises a method of purifying double-stranded DNA from a
XX solution containing the double-stranded DNA mixed with other components,
XX comprising passing the solution through a support comprising a covalently
```

```
CC coupled oligonucleotide capable of forming a triple helix with the double
CC -stranded DNA by hybridisation with a specific sequence present in the
CC double-stranded DNA. The method is useful for purifying double-stranded
CC DNA contained in a solution and mixed with other components. The new
CC method is a simple, rapid and effective method for DNA purification, and
CC makes it possible to obtain especially high purities with high yields.
CC The method enables DNA to be purified from complex mixtures comprising
CC other nucleic acids, proteins, endotoxins, nucleases and the like. The
CC supports may be readily recycled, and the DNAs obtained display improved
CC properties to pharmaceutical safety. Further, the method entails only one
CC step contrary to prior art. The present sequence represents an
CC oligonucleotide used to purify the XL2726 plasmid using the method of the
CC invention
XX
SQ Sequence 26 BP; 1 A; 11 C; 2 G; 12 T; 0 U; 0 Other;
XX
Query Match 0.4%; Score 19.2; DB 1; Length 26;
Best Local Similarity 87.5%; Pred. No. 2.6e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1180 AGAGAAAGAGAGAGAGAAATCA 1203
Db 26 AGAGAGAGAGAGAGAGAGAGACCA 3
XX
RESULT 123
ABS52638/c
ID ABS52638 standard; DNA; 26 BP.
XX
AC ABS52638;
XX
DT 15-NOV-2002 (first entry)
XX
DE Human secreted salivary protein zsig63 PCR primer ZC7764a.
XX
XX
KW Human; secreted salivary protein; zsig63; immunogen; zsig63-cytokine;
KW antibody-cytokine; in vivo killing; pathological microbe; bacteria;
KW fungal; viral; infection; salivary gland; anti-microbial; dental caries;
KW tooth decay; periodontal disease; thrush; gastrointestinal disease;
KW urinary tract infection; vaginal infection; skin infection; microflora;
KW epithelial wound; pathogenic colonisation; invasion; pro-inflammatory;
KW chronic tissue damage; vascular system; diabetes; anti-inflammatory;
KW incompetent immune system; AIDS; acquired immunodeficiency syndrome;
KW chemotherapy; radiation treatment; lung infection; cystic fibrosis;
KW digestion; PCR; primer; ss.
XX
XX Homo sapiens.
XX
XX US2002081701-A1.
XX
XX 27-JUN-2002.
XX
XX 03-AUG-2001; 2001US-00922480.
XX
XX 17-MAR-1999; 99US-0124820P.
XX
XX 17-MAR-2000; 2000US-00527345.
XX
XX (ADLE/) ADLER D A.
XX (SHEP/) SHEPPARD P O.
XX
XX Adler DA, Sheppard PO;
XX
XX WPI; 2002-635468/68.
XX
XX Novel secreted salivary protein, zsig63 and polynucleotide encoding it
XX useful for treating microbial infections, inflammatory conditions, dental
XX caries and lung infections associated with cystic fibrosis.
XX
XX Example 1; Page 29; 33pp; English.
XX
XX The present invention relates to a new secreted salivary protein, zsig63.
XX The invention is useful for detecting in a test sample, the presence of
XX an antagonist or agonist of zsig63 protein activity. The invention is
```

CC also useful as an immunogen for producing an antibody to zsig63
CC polypeptide. zsig63-cytokine fusion proteins or antibody-cytokine fusion
CC protein are useful for enhancing in vivo killing of target tissues.
CC Pharmaceutical composition comprising purified zsig63 polypeptide are
CC useful in the treatment of conditions associated with pathological
CC microbes, including bacterial, fungal and viral infections. High
CC expression of zsig63 in salivary gland suggests that anti-microbial
CC polypeptides are useful for treatment of dental caries (tooth decay),
CC periodontal disease, thrush and gastrointestinal diseases. Other
CC applications can be used in urinary tract infections, vaginal infections,
CC prevention of infection in skin and other epithelial wounds. The
CC polypeptides can be used to establish normal microflora and protect
CC against pathogenic colonisation and invasion. The invention is useful
CC when pro-inflammatory activity is desired. Applications for such pro-
CC inflammatory activity include the treatment of chronic tissue damage,
CC particularly in areas having a limited or damaged vascular system e.g.,
CC damage in extremities associated with diabetes. Antagonists to zsig63
CC polypeptides may be useful as anti-inflammatory agents. The invention is
CC useful for the treatment of patients having incompetent immune system,
CC such as AIDS (acquired immunodeficiency syndrome) patients or individuals
CC that have undergone chemotherapy, radiation treatment. The invention is
CC also useful for the treatment of lung infections associated with cystic
CC fibrosis and its agonists or antagonists are useful for aiding digestion.
CC The present nucleic acid sequence represents a PCR primer that was used
CC in the methods of the invention for identification of zsig63
CC
SQ Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.4%; Score 19.2; DB 1; Length 26;
Best Local Similarity 87.5%; Pred. No. 2.6e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5392 TAAAAAATACAAAAAGAAAAA 5415
DB 26 TAAAAAATACAAAAAGAAAAA 3

RESULT 124
AAD45055/c
ID AAD45055 standard; DNA; 26 BP.

AC AAD45055;
XX
DT 27-DEC-2002 (first entry)

DE ZC7764a primer used in the identification of human zsig63 DNA.

XX Human; secreted salivary protein; zsig63 protein; host defense protein;
KW immune modulating factor; antipathogenic; cell-cell signalling molecule;
KW growth factor; cytokine; growth factor hormone activity; dental caries;
KW infection; tooth decay; periodontal disease; gastrointestinal diseases;
KW thrush; urinary tract infection; vaginal infection; diabetes; obesity;
KW anti-inflammatory; chronic tissue damage; lung dysfunction; restenosis;
KW gene therapy; salivary gland dysfunction; prostate gland dysfunction;
KW forensic DNA profiling; chondrosarcoma; atherosclerosis; primer; ss.

OS Homo sapiens.

PN US2002090677-A1.

PD 11-JUL-2002.

PF 03-AUG-2001; 2001US-00923236.

PR 17-MAR-1999; 99US-0124820P.

PR 17-MAR-2000; 2000US-00527345.

PA (ADLER/) ADLER D A.

PI (SHEP/) SHEPPARD P O.

XX Adler DA, Sheppard PO;
XX WPI; 2002-642378/69.

XX Novel secreted salivary polypeptide, zsig63, useful as antimicrobial
PT agent for treating microbial infection, dental caries, periodontal
PT disease, thrush gastrointestinal disease, and for aiding digestion.

PS Example 1; Page 30; 33pp; English.

XX The invention relates to human secreted salivary polypeptide designated
CC as zsig63 and nucleic acid molecules encoding such polypeptides. zsig63
CC can be used in detecting agonists and antagonists of its activity, and its
CC also useful as a host defense polypeptide, immune modulating factor,
CC antipathogenic polypeptide, cell-cell signalling molecule, growth factor,
CC cytokine, or as secreted extracellular matrix associated proteins with
CC growth factor hormone activity. It is useful for treating conditions
CC associated with pathological microbes, including bacterial, fungal and
CC viral infections, for treating dental caries (tooth decay), periodontal
CC disease, thrush and gastrointestinal disease, for treating urinary tract
CC infection, vaginal infection and for preventing infection in skin and
CC other epithelial wounds. zsig63 is useful for establishing normal
CC microflora and protect against pathogenic colonisation and invasion, for
CC treating chronic tissue damage e.g. damage in extremities associated with
CC diabetes and useful as anti-inflammatory agents. It is useful as a marker
CC of lung dysfunction, salivary gland dysfunction, or dysfunction of
CC prostate gland. It is also therapeutically useful for aiding digestion.
CC Polynucleotides of the invention are used in gene therapy for increasing
CC or inhibiting zsig63 activity, for detecting abnormalities on human
CC chromosome 4 associated with disease or other human traits and as
CC diagnostic in forensic DNA profiling. Sequences of the invention are
CC useful for stimulating proliferation or differentiation of cardiac
CC myocytes, for proliferation or differentiation of adipocytes and for
CC inhibiting chondrosarcomas, atherosclerosis, restenosis and obesity. The
CC present sequence is a primer used in the identification of human zsig63
CC DNA

SQ Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.4%; Score 19.2; DB 1; Length 26;
Best Local Similarity 87.5%; Pred. No. 2.6e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5392 TAAAAAATACAAAAAGAAAAA 5415
DB 26 TAAAAAATACAAAAAGAAAAA 3

RESULT 125
AAS20671/c
ID AAS20671 standard; DNA; 26 BP.

AC AAS20671;

DT 09-APR-2002 (first entry)

DE Human zalphall ligand sequencing primer ZC7764a.

XX Cytokine; zalphall ligand; zalphall receptor; NK cell progenitor;
KW natural killer cell proliferation; T-cell proliferation;
KW B-cell proliferation; anti-tumour response; immune system;
KW immunostimulant; cytostatic; human; sequencing primer; ss.

OS Homo sapiens.

PN US6307024-B1.

PD 23-OCT-2001.

PF 09-MAR-2000; 2000US-00522217.

PR 09-MAR-1999; 99US-0123547P.

PR 11-MAR-1999; 99US-0123504P.

PR 01-JUL-1999; 99US-0142013P.

PA (ZYMO) ZYMOGENETICS INC.

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XX  Novak JE, Prensell SR, Sprecher CA, Foster DC, Holly RD,
PI  Grose JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;
XX  MPI; 2002-040208/05.
XX
XX  New zalphall ligand polypeptides and polynucleotides, useful for
PT  stimulating proliferation, activation, differentiation and/or induction
PT  of inhibition of specialized cell function, or for stimulating an
XX  antigenic response.
XX
XX  Example 7; Col 139; 105pp; English.
XX
XX  The present invention relates to the isolation of a novel cytokine,
CC  zalphall ligand and the polynucleotide encoding it. The invention also
CC  gives the sequence for the zalphall receptor and the polynucleotide
CC  encoding it. The zalphall ligand polypeptide stimulates proliferation of
CC  natural killer (NK) cells or NK cell progenitors; the activation of NK
CC  cells, proliferation of T-cells, proliferation of B-cells stimulated with
CC  anti-CD40 antibodies, stimulates an antigenic response in a mammal, and
CC  reduces proliferation of B-cells stimulated with anti-19M antibodies. The
CC  zalphall ligand polypeptide is also useful in preparing antibodies that
CC  bind to zalphall ligand epitopes. The zalphall ligand polynucleotides can
CC  be used as probes or primers to clone regions of a zalphall ligand gene,
CC  and in gene therapy. Zalphall ligand may also be used to identify
CC  inhibitors of its activity, to enhance the generation of anti-tumour
CC  responses with or without the infusion of donor lymphocytes, and to
CC  activate or stimulate the immune system. The present sequence represents
CC  a sequencing primer used to sequence cDNA clones in the isolation of
XX  human zalphall ligand
XX
XX  Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
SQ
XX
XX  Query Match          0.4%; Score 19.2; DB 1; Length 26;
XX  Best Local Similarity 87.5%; Pred. No. 2.6e+02;
XX  Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX  5392 TAAAAAATACAAAAAGAAAAA 5415
XX  ||||| ||||| ||||| |||||
XX  26 TAAAAAATACAAAAAGAAAAA 3
XX
XX  RESULT 126
XX  ABX93599/C
XX  ID ABX93599 standard; DNA; 26 BP.
XX
XX  ABX93599;
XX
XX  28-MAY-2003 (first entry)
XX
XX  Human zsig63 PCR/sequencing primer ZC7764a.
XX
XX  ss: PCR: zsig63; adhesion; salivary gland; dental carries;
XX  periodontal disease; thrush; gastrointestinal disease; epithelial wound;
XX  urinary tract infection; vaginal infection; skin infection; primer;
XX  pro-inflammatory; chronic tissue damage; vascular disease; AIDS;
XX  lung infection; cystic fibrosis; lung dysfunction; digestive;
XX  salivary gland carcinoma; Pneumocystis carinii infection; emphysema;
XX  chronic bronchitis; prostate dysfunction; prostate adenocarcinoma;
XX  cell culture media; gene therapy; human chromosome 4q12-4q13;
XX  dentinogenesis imperfecta; dentin dysplasia type II.
XX
XX  Synthetic.
XX
XX  US2002173027-A1.
XX
XX  21-NOV-2002.
XX
XX  03-AUG-2001; 2001US-00922469.
XX
XX  17-MAR-1999; 99US-0124820P.
XX  17-MAR-2000; 2000US-00527345.
XX

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PA  (ADBE/) ADLER D A.
PA  (SHEP/) SHEPPARD P O.
XX  Adler DA, Shepard PO;
XX  MPI; 2003-328428/31.
XX
XX  Novel isolated zsig63 polypeptide, member of the adhesion family, useful
PT  for treating dental carries, periodontal disease, thrush,
PT  gastrointestinal disease, urinary tract infections, vaginal infections,
PT  skin infections.
XX
XX  Example 1; Page 29; 32pp; English.
XX
XX  The invention relates to an isolated zsig63 polypeptide comprising at
CC  least 90% identity to an amino acid sequence which comprises domain 1 of
CC  zsig63, domain 2, domain 3, mature zsig63 and full length zsig63. Also
CC  included are the polynucleotide encoding zsig63, a zsig63 expression
CC  vector, a cultured cell comprising the vector and expressing the protein,
CC  a DNA encoding a fusion protein (comprising amino acids 1-15, 16-37, 38-
CC  126, 127-219 or 16-219 of zsig63 and an additional protein), using a
CC  zsig63 reporter gene construct to identify zsig63 agonists, and producing
CC  an anti-zsig63 antibody using zsig63 immunogenic peptides. Zsig63 is
CC  useful for detecting in a test sample, the presence of antagonist of
CC  zsig63 protein activity. Zsig63 has antimicrobial activity and since
CC  exhibits high expression in salivary gland, thrush, and gastrointestinal
CC  dental carries, periodontal disease, thrush, and gastrointestinal
CC  disease, urinary tract infections, vaginal infections, skin infections
CC  and other epithelial wounds. The polypeptides can be used to establish
CC  normal microflora and protect against pathogenic colonization and
CC  invasion. Zsig63 can also be used for providing pro-inflammatory activity
CC  for treating chronic, tissue damage particularly in areas having limited
CC  or damaged vascular system, e.g. in diabetes, and for treating
CC  immunocompromised AIDS patients or in individuals that have undergone
CC  chemotherapy, radiation treatment, for treating lung infections e.g. in
CC  cystic fibrosis. Detection of zsig63 polypeptide at relatively high
CC  levels in the trachea may indicate that such polypeptides may serve as a
CC  marker of lung dysfunction. Zsig63 is also useful in diagnosing
CC  conditions associated with salivary gland or lung dysfunction including
CC  salivary gland carcinoma, Pneumocystis carinii infection, emphysema,
CC  chronic bronchitis, prostate dysfunctions such as prostate
CC  adenocarcinoma, aiding digestion, and as components of defined cell
CC  culture media and may be used to replace serum that is commonly used in
CC  culture. The DNA is useful in gene therapy applications to increase or
CC  inhibit zsig63 activity, and for detecting abnormalities on human
CC  chromosome 4 (e.g. 4q12-4q13, associated with dentinogenesis imperfecta,
CC  and dentin dysplasia type II). Zsig63 is an adhesion family member. The
CC  present sequence is a primer used to isolate and sequence nucleic acids
XX  encoding human zsig63
XX
XX  Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
SQ
XX
XX  Query Match          0.4%; Score 19.2; DB 1; Length 26;
XX  Best Local Similarity 87.5%; Pred. No. 2.6e+02;
XX  Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX  5392 TAAAAAATACAAAAAGAAAAA 5415
XX  ||||| ||||| ||||| |||||
XX  26 TAAAAAATACAAAAAGAAAAA 3
XX
XX  RESULT 127
XX  ADD33380
XX  ID ADD33380 standard; DNA; 26 BP.
XX
XX  ADD33380;
XX
XX  15-JAN-2004 (first entry)
XX
XX  Mouse mitochondrial DNA sequence SEQ ID NO:1151.
XX
XX  ds; mouse; array; mitochondrial; hybridisation; energy-metabolism;
XX  mitochondrial disease; oxidative phosphorylation dysfunction;
XX

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KM oxidative stress; apoptosis; aging.
 XX Mus musculae.
 OS
 PN WO2003020220-A2.
 XX
 PD 13-MAR-2003.
 XX
 PF 30-AUG-2002; 2002WO-US027886.
 XX
 PR 30-AUG-2001; 2001US-0316323P.
 PR 31-AUG-2001; 2001CA-02356540.
 XX
 PA (UYEM-) UNIV EMORY.
 PI Wallace DC, Levy S, Kerestam K, Procaccio V,
 XX MPI; 2003-300821/29.
 XX
 PT Array containing probes for genes involved in mitochondrial biology,
 PT useful for determining mitochondrial biology gene expression profiles for
 PT use in diagnosing pathologies and identifying biochemical pathways.
 PS
 PS Claim 2; SEQ ID NO 1151; 201pp; English.
 XX
 CC The invention relates to a novel array comprising at least two isolated
 CC nucleotide molecules, each molecule having a sequence capable of uniquely
 CC hybridizing to a nucleic acid molecule which is an expression product of
 CC a gene involved in mitochondrial biology. The array comprises two or more
 CC isolated nucleic acid molecules or spots, each molecule having a sequence
 CC chosen from sequence of 994 human probes and 2046 mouse probes. An array
 CC of the invention is useful for determining an expression profile of a
 CC mouse or human sample containing nucleic acid, by contacting the array
 CC with the sample under conditions allowing selective hybridisation, and
 CC measuring hybridisation of nucleic acid in the sample to the array to
 CC produce an expression profile. The array is also useful for determining
 CC an expression profile of a first labelled sample containing nucleic acid
 CC relative to a second, differently labelled sample containing nucleic
 CC acid. The second sample is a reference or a standard. An array is useful
 CC for determining an expression profile diagnostic of an energy-metabolism-
 CC related physiological condition. An array of the invention is useful for
 CC determining mitochondrial biology gene expression profiles of organisms,
 CC such as human, mice and closely related species, tissue and organs of
 CC such organisms, which are useful for determining expression profiles
 CC diagnostic of energy metabolism-related physiological conditions,
 CC diagnosing such physiological conditions, identifying biochemical
 CC pathways, genes, and mutations involved in such physiological conditions,
 CC identifying therapeutic agents useful for preventing and/or treating such
 CC physiological conditions, evaluating and/or monitoring the efficacy of
 CC such therapies, and creating and identifying animal models of human
 CC energy metabolism-related physiological conditions. An array is also
 CC useful for defining expression signatures or profiles for mitochondrial
 CC diseases, as well as distinguishing clinical disorders that result from
 CC oxidative phosphorylation (OXPHOS) dysfunction, oxidative stress,
 CC apoptosis and aging. An array of the invention contains probes of genes
 CC not previously recognised to participate in mitochondrial biology. The
 CC sequences shown in ADP33224-ADP35260 represent murine mitochondrial DNA
 CC clones used to make the probes of the invention. Some sequences are not
 CC present, these are SEQ ID NO's 295, 1174, 1213, 1700, 1728, 1730, 1905,
 CC 1906, 2408 and 2643.
 XX
 SO Sequence 26 BP; 13 A; 5 C; 8 G; 0 T; 0 U; 0 Other;
 Query Match 0.4%; Score 19.2; DB 1; Length 26;
 Best Local Similarity 87.5%; Pred. No. 2.6e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1192 AGAGAGAAATCAGAGAAAGCAGG 1215
 DB 3 AGACAGAAACCAAGCAAAAGCAGG 26
 RESULT 128

ADH44608/c
 ID ADH44608 standard; DNA; 26 BP.
 XX
 AC ADH44608;
 XX
 DT 25-MAR-2004 (first entry)
 XX
 DE Human cDNA encoding Zalphal1 sequencing primer #2.
 XX
 KW Human; ss; Zalphal1 ligand; Zalphal1 receptor; immune response;
 KW tumour progression; metastasis; tumour stasis; haematopoietic tumour;
 KW lymphoma; B cell tumour; systemic lupus erythematosus;
 KW rheumatoid arthritis; myasthenia gravis; diabetes; infectious disease;
 KW immunocompromised patient; HIV infection; vaccine; primer.
 XX
 OS Homo sapiens.
 XX
 PN US6605272-B2.
 XX
 PD 12-AUG-2003.
 XX
 PF 03-AUG-2001; 2001US-00923246.
 XX
 PR 09-MAR-1999; 99US-0123547P.
 PR 11-MAR-1999; 99US-0123904P.
 PR 01-JUL-1999; 99US-0142013P.
 PR 09-MAR-2000; 2000US-00522217.
 XX
 PA (ZYMO) ZYMOGENETICS INC.
 PI Novak JR, Preenell SR, Sprecher CA, Foster DC, Holly RD;
 PI Gross JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;
 XX MPI; 2003-895283/82.
 XX
 DR Stimulating an immune response in a mammal exposed to an antigen or
 XX pathogen, useful for enhancing anti-tumor activity resulting in reduced
 PT tumor progression or metastasis, comprises administering zalphal1 ligand
 PT polypeptide.
 PS
 PS Example 7; SEQ ID NO 38; 103pp; English.
 XX
 CC The invention relates to stimulating an immune response in a mammal
 CC exposed to an antigen or pathogen comprises administering a composition
 CC comprising mature zalphal1 ligand polypeptide comprising residues 33-162
 CC of ADH44572 in a pharmaceutical vehicle. Also included are stimulating an
 CC immune response in a mammal exposed to an antigen or pathogen
 CC (comprising: (a) determining (in)directly the level of antigen or
 CC pathogen present in the mammal; (b) administering a composition
 CC comprising zalphal1 ligand polypeptide in a pharmaceutical vehicle; (c)
 CC determining (in)directly the level of antigen or pathogen in the mammal;
 CC and (d) comparing the antigen or pathogen level in (a) with (b), where a
 CC change in the level indicates stimulation of immune response), and
 CC stimulating an immune response in a mammal exposed to an antigen or
 CC pathogen (comprising: (a) determining a level of antigen- or pathogen-
 CC specific antibody; (b) administering a composition comprising zalphal1
 CC ligand polypeptide in a pharmaceutical vehicle; (c) determining a post
 CC administration level of the antigen- or pathogen-specific antibody; and
 CC (d) comparing the level of the antibody in (a) with (b), where an
 CC increase in the antibody level indicates stimulation of immune response).
 CC The method is useful for stimulating an immune response in a mammal
 CC exposed to an antigen or pathogen, and for enhancing anti-tumour activity
 CC resulting in a reduction in tumour progression, decrease in metastasis,
 CC or tumour stasis. The tumour may be a haematopoietic tumour, a lymphoma
 CC or a B cell tumour. The zalphal1 ligand is useful for treating a wide
 CC range of diseases arising from defects in the immune system, e.g.,
 CC systemic lupus erythematosus, rheumatoid arthritis, myasthenia gravis, or
 CC diabetes, for boosting immunity to infectious diseases, treating
 CC immunocompromised patients, such as HIV+ patients and in improving
 CC vaccines. The present sequence is a sequencing primer used in the
 CC exemplification of the invention.
 XX
 SO Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.4%; Score 19.2; DB 1; Length 26;
Best Local Similarity 87.5%; Pred. No. 2.6e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5392 TAAAAAATACAAAAAGAAAAA 5415
|||||
DB 26 TAAAAAATACAAAAAGAAAAA 3

RESULT 129

AD100944/C
ID AD100944 standard; DNA; 26 BP.

AC AD100944;
XX

DT 22-APR-2004 (first entry)
XX

DE Sequencing primer SEQ 38 used to analyse human zai1phail ligand clone DNA.
XX

KW zai1phail ligand; immunity; infectious disease; immunocompromised patient;
KM HIV; vaccine; human; ss; PCR; primer.
XX

OS Homo sapiens.
XX

PN US2003125524-A1.
XX

PD 03-JUL-2003.
XX

PF 15-NOV-2002; 2002US-00295723.
XX

PR 09-MAR-2000; 2000US-00522217.
XX

PA (ZYMO) ZYMOGENETICS INC.
XX

PI Novak JE, Presnell SR, Sprecher CA, Foster DC, Holly RD;
PI Gross JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;
XX

DR WPI; 2003-811003/76.
XX

PT New zai1phail ligand polypeptides, useful for boosting immunity to
PT infectious diseases, and treating immunocompromised patients, such as
PT human immunodeficiency virus (HIV) patients, or in improving vaccines.
XX

PS Example 7; SEQ ID NO 38; 113pp; English.
XX

CC The invention relates to a novel isolated zai1phail ligand polypeptide.
CC The polypeptide of the invention may be useful for boosting immunity to
CC infectious diseases and treating immunocompromised patients, such as HIV
CC patients, as well as in improving vaccines. The current sequence is that
CC of the PCR primer which was used in the exemplification of the invention.
XX

CC Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
XX

Query Match 0.4%; Score 19.2; DB 1; Length 26;
Best Local Similarity 87.5%; Pred. No. 2.6e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5392 TAAAAAATACAAAAAGAAAAA 5415
|||||
DB 26 TAAAAAATACAAAAAGAAAAA 3

RESULT 130

AD19767/C
ID AD19767 standard; DNA; 26 BP.

AC AD19767;
XX

DT 26-AUG-2004 (first entry)
XX

DE Human zai1phail ligand PCR primer seqid 38.
XX

KW cytostatic; zai1phail ligand; pharmaceutical; cancer; immune response;
KM melanoma; tumor; solid tumor; hematopoietic tumor; lymphoma; human;
KM PCR; primer; ss.
XX

OS Homo sapiens.
XX

PN US2004110932-A1.
XX

PD 10-JUN-2004.
XX

PF 10-SEP-2003; 2003US-00659684.
XX

PR 09-MAR-1999; 99US-0123547P.
XX

PR 11-MAR-1999; 99US-0123904P.
XX

PR 01-JUL-1999; 99US-0142013P.
XX

PR 09-MAR-2000; 2000US-00522217.
XX

PA (ZYMO) ZYMOGENETICS INC.
XX

PI Novak JE, Presnell SR, Sprecher CA, Foster DC, Holly RD;
PI Gross JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;
XX

DR WPI; 2004-440401/41.
XX

PT New zai1phail ligand polynucleotide and polypeptide molecules, useful for
PT treating cancer, e.g. melanoma, solid tumor, hematopoietic tumor, or
PT lymphoma.
XX

PS Example 7; SEQ ID NO 38; 111pp; English.
XX

CC The invention describes an isolated polypeptide comprising a sequence of
CC amino acid residues that is at least 90 or 95% identical to residues 41
CC (Gln) to 148 (Ile), or 32 (Gln) to 148 (Ile) of a sequence of 162 amino
CC acids (SEQ ID NO:2, human zai1phail ligand), fully defined in the
CC specification. Also described are: a pharmaceutical composition
CC comprising the polypeptide, and a vehicle; a method of treating cancer in
CC a mammal; a method of stimulating an immune response in a mammal with
CC melanoma; a method of stimulating an immune response in a mammal bearing
CC a tumor; an isolated polynucleotide comprising a sequence of nucleotides
CC that encode amino acid residues cited above, where the polynucleotide
CC encodes a polypeptide that binds a receptor comprising 538 amino acids,
CC fully defined in the specification; a pharmaceutical composition
CC comprising the polynucleotide encoding, in a pharmaceutically acceptable
CC vehicle, an expression vector comprising the following operably linked
CC elements: a control element; and a DNA segment comprising the
CC polynucleotide; and an isolated polynucleotide molecule comprising at
CC least 10 nucleotides of the polynucleotide sequence of 642 bp, fully
CC defined in the specification. The molecules, compositions and methods are
CC useful for treating cancer, e.g. melanoma, solid tumor, hematopoietic
CC tumor, or lymphoma. This sequence represents a primer used in the
CC expression cloning of human cytokine zai1phail ligand.
XX

CC Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
XX

Query Match 0.4%; Score 19.2; DB 1; Length 26;
Best Local Similarity 87.5%; Pred. No. 2.6e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5392 TAAAAAATACAAAAAGAAAAA 5415
|||||
DB 26 TAAAAAATACAAAAAGAAAAA 3

RESULT 131

ADJ13038/C
ID ADJ13038 standard; DNA; 21 BP.

AC ADJ13038;
XX

DT 20-MAY-2004 (first entry)
XX

DE Human DNA probe used to immobilise CpG methylated DNA SeqID 165.
XX

KM probe; ss; chemical modification; methylation; array; CpG island;
 KM tumour suppressor; p16; human; H69; H1618.
 XX Homo sapiens.
 OS
 XX US2003152950-A1.
 PN
 XX 14-AUG-2003.
 PD
 XX 27-JUN-2002; 2002US-00184085.
 PF
 XX 27-JUN-2001; 2001US-0301370P.
 PR
 XX (GARN/) GARNER H R.
 PA (MINN/) MINNA J D.
 PA (UEB/) LUEBKE K J.
 PA (BALO/) BALOG R P.
 XX
 PI Garner HR, Minna JD, Luebke KJ, Balog RP;
 DR WPI, 2003-874843/81.
 XX
 PT Analysis of chemical modification of DNA involves obtaining sample of DNA
 PT to be analyzed, treating DNA with chemical reagents that result in
 PT different base sequences, and determining sequence of resulting DNA.
 CC
 PS Example 1; SEQ ID NO 165; 210pp; English.
 XX
 CC This invention relates to a novel method for analysing chemically
 CC modified macromolecules. Specifically, it refers to a high throughput
 CC method for the parallel analysis of many potential sites of chemical
 CC modification (e.g. methylation) in DNA. The present invention describes
 CC treating the DNA with one or more chemical reagents that result in
 CC different base sequences depending upon the presence or absence of the
 CC modification of interest. Accordingly, a device comprising an array of
 CC probes is provided to hybridise with and select the altered DNA sequences
 CC that comprise the modifications of interest such as a CpG island. In
 CC particular, this invention refers to analysing the methylation pattern of
 CC a region of the promoter for the tumour suppressor gene p16 from two
 CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
 CC is a human DNA probe used to immobilise CpG methylated DNA of the
 CC invention.
 CC
 SQ Sequence 21 BP; 3 A; 11 C; 0 G; 7 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 19; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 2.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OS
 QY 2436 GGATGGAAGCGGAGGCT 2454
 DB 19 GGATGGAAGCGGAGGCT 1
 XX
 RESULT 132
 AANT70281/C
 ID AANT70281 standard; DNA; 27 BP.
 XX
 AC AANT70281;
 XX
 DT 03-OCT-2002 (revised)
 DT 26-MAY-1991 (first entry)
 XX
 DE Sequence of scissile link probe MRC071 (HL).
 XX
 KM Hybridisation; probe; ss.
 XX
 OS Synthetic.
 XX
 PS EP227976-A.
 PN
 XX
 PD 08-JUL-1987.
 XX

PF 04-DEC-1986; 86EP-00116906.
 XX
 PR 05-DEC-1985; 85US-00805279.
 XX
 PA (MEIO-) MEIOGENICS INC.
 XX
 PI Duck P, Bender R, Crosby W, Robertson JG;
 DR WPI, 1987-186567/27.
 XX
 XX Synthetic nucleic acid probes - comprising two nucleic acid sequences
 PT linked by a scissile linkage.
 PT
 PS Example; p29; 46pp; English.
 XX
 CC The patent claims a new molecule of formula (NA1----S----NA2)n. NA1 and
 CC NA2 are noncomplementary nucleic acid sequences; ---S--- = a scissile
 CC linkage; n= 1 or 1,000, which is used for the detection of specific DNA
 CC or RNA sequences in a test soln. The scissile link probes may be PL
 CC (Permanent Linkage to Solid Support) or HL (Hydrolyzable Linkage to Solid
 CC Support). The differential lability of DNA and RNA may be exploited in a
 CC heterogeneous system when the scissile linkage is an RNA molecule. In the
 CC examples, counter probe molecules 9 through 16 were used to determine
 CC suitable hybridisation conditions. (Updated on 03-OCT-2002 to add missing
 CC OS field.)
 CC
 SQ Sequence 27 BP; 0 A; 0 C; 0 G; 25 T; 2 U; 0 Other;
 XX
 Query Match 0.3%; Score 19; DB 1; Length 27;
 Best Local Similarity 81.5%; Pred. No. 2.8e+02;
 Matches 22; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 OS
 QY 5389 AATTAAAAAAATTCAAAAAGAAAAA 5415
 DB 27 AAAAAAAAAAAAAAAAAAAAAAAAAA 1
 XX
 RESULT 133
 AANT70274/C
 ID AANT70274 standard; DNA; 27 BP.
 XX
 AC AANT70274;
 XX
 DT 03-OCT-2002 (revised)
 DT 26-MAY-1991 (first entry)
 XX
 DE Sequence of scissile link probe MRC046 (PL).
 XX
 KM Hybridisation; probe; ss.
 XX
 OS Synthetic.
 XX
 PN EP227976-A.
 PN
 PD 08-JUL-1987.
 XX
 PF 04-DEC-1986; 86EP-00116906.
 XX
 PR 05-DEC-1985; 85US-00805279.
 XX
 PA (MEIO-) MEIOGENICS INC.
 XX
 PI Duck P, Bender R, Crosby W, Robertson JG;
 DR WPI, 1987-186567/27.
 XX
 XX Synthetic nucleic acid probes - comprising two nucleic acid sequences
 PT linked by a scissile linkage.
 PT
 PS Example; p29; 46pp; English.
 XX
 CC The patent claims a new molecule of formula (NA1----S----NA2)n. NA1 and
 CC NA2 are noncomplementary nucleic acid sequences; ---S--- = a scissile

CC linkage; n= 1 or 1,000, which is used for the detection of specific DNA
CC or RNA sequences in a test soln. The scissile link probes may be PL
CC (Permanent Linkage to Solid Support) or HL (Hydrolyzable Linkage to Solid
CC Support). The differential liability of DNA and RNA may be exploited in a
CC heterogeneous system when the scissile linkage is an RNA molecule. In the
CC examples, counter probe molecules 9 through 16 were used to determine
CC suitable hybridisation conditions. (Updated on 03-OCT-2002 to add missing
CC OS field.)
XX
SQ Sequence 27 BP; 0 A; 0 C; 0 G; 21 T; 6 U; 0 Other;

Query Match 0.3%; Score 19; DB 1; Length 27;
Best Local Similarity 81.5%; Pred. No. 2.8e+02;
Matches 22; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 5389 AATTAAAAATTCAAAAAGAAAAA 5415
DB 27 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 134
AAN92240/C
ID AAN92240 standard; DNA; 27 BP.
XX
AC AAN92240;
XX
DT 25-MAR-2003 (revised)
DT 31-OCT-2002 (revised)
DT 25-APR-1990 (first entry)
XX
DE SS probe MRCO46.
XX
KM Probe MRCO46; solid support; ribonuclease.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..10
FT /tag= a
FT /note= "deoxyribonucleotides."
FT misc_feature 11..16
FT /tag= b
FT /note= "ribonucleotides."
FT misc_feature 17..27
FT /tag= c
FT /note= "deoxyribonucleotides."
XX
PN MO8910415-A.
XX
PD 02-NOV-1989.
XX
PF 29-APR-1988; 88US-00187814.
XX
PR 29-APR-1988; 88US-00187814.
XX
PA (MEIO-) MEIOGENICS INC.
XX
PI Duck P, Bender R;
XX
WPI; 1989-339977/46.
XX
PT Detecting target nucleic acid molecules - using excess complementary
PT nucleic acid probes and nicking to complete a cycling sequence.
XX
PS Disclosure; Page 24; 34pp; English.
XX
CC Probe MRCO46 is bound by a permanent linkage to a solid support at its 3'
CC end. It is used by reacting excess probe with a target nucleic acid;
CC nicking hybridised probe at least once within a predetermined sequence to
CC form 2 or more probe fragments hybridised to the target sequence, which
CC results in the probe fragments becoming hybridised to another probe; and
CC identifying probe fragments, so detecting the target sequence. The probe
CC can react with target sequence to complete a cycling sequence. Using this

CC system, sensitivity of 10 exp. -19 to 10 exp. -20 molecules of target can
CC be obtained. The probe is cleavable at the ribonucleotides by a ds RNase, eg
CC RNase H or ExoIII. (Updated on 31-OCT-2002 to add missing OS field.)
CC (Updated on 25-MAR-2003 to correct PR field.)
XX
SQ Sequence 27 BP; 0 A; 0 C; 0 G; 21 T; 6 U; 0 Other;

Query Match 0.3%; Score 19; DB 1; Length 27;
Best Local Similarity 81.5%; Pred. No. 2.8e+02;
Matches 22; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 5389 AATTAAAAATTCAAAAAGAAAAA 5415
DB 27 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 135
AAN92247/C
ID AAN92247 standard; DNA; 27 BP.
XX
AC AAN92247;
XX
DT 25-MAR-2003 (revised)
DT 31-OCT-2002 (revised)
DT 25-APR-1990 (first entry)
XX
DE SS probe MRCO71.
XX
KM Probe MRCO71; solid support; ribonuclease.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..15
FT /tag= a
FT /note= "deoxyribonucleotides."
FT misc_feature 16..17
FT /tag= b
FT /note= "ribonucleotides."
FT misc_feature 18..27
FT /tag= c
FT /note= "deoxyribonucleotides."
XX
PN MO8910415-A.
XX
PD 02-NOV-1989.
XX
PF 29-APR-1988; 88US-00187814.
XX
PR 29-APR-1988; 88US-00187814.
XX
PA (MEIO-) MEIOGENICS INC.
XX
PI Duck P, Bender R;
XX
WPI; 1989-339977/46.
XX
PT Detecting target nucleic acid molecules - using excess complementary
PT nucleic acid probes and nicking to complete a cycling sequence.
XX
PS Disclosure; Page 24; 34pp; English.
XX
CC Probe MRCO71 is bound by a hydrolyzable linkage to a solid support at its
CC 3' end. It is used by reacting excess probe with a target nucleic acid;
CC nicking hybridised probe at least once within a predetermined sequence to
CC form 2 or more probe fragments hybridised to the target sequence, which
CC results in the probe fragments becoming hybridised to another probe; and
CC identifying probe fragments, so detecting the target sequence. The probe
CC can react with target sequence to complete a cycling sequence. Using this
CC system, sensitivity of 10 exp. -19 to 10 exp. -20 molecules of target can
CC be obtained. The probe is cleavable at the ribonucleotides by a ds RNase, eg
CC RNase H or ExoIII. (Updated on 31-OCT-2002 to add missing OS field.)
CC (Updated on 25-MAR-2003 to correct PR field.)


```

XX      Sequence 27 BP; 0 A; 0 C; 0 G; 25 T; 2 U; 0 Other;
SQ
    Query Match          0.3%; Score 19; DB 1; Length 27;
    Best Local Similarity 81.5%; Pred. No. 2.8e+02;
    Matches 22; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
OY      5389 AATTAAATAATACAAAAAGAAAAA 5415
        ||||| | | | | | | | | | |
DB      27 AAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 136
AAQ40854
ID      AAQ40854 standard; DNA; 27 BP.
XX
XX      AAQ40854;
AC
XX
XX      23-SEP-1993 (first entry)
DT
DE      DNA sequence used in DNA replication method.
XX
XX      ss.
XX
XX      Synthetic.
OS
XX      JP05103673-A.
PN
XX      27-APR-1993.
PD
XX
XX      26-AUG-1991; 91JP-00240525.
PF
XX
XX      26-AUG-1991; 91JP-00240525.
PR
XX
XX      26-AUG-1991; 91JP-00240525.
PA      (UYAR-) UNIV ARIZONA.
XX
XX      WPI; 1993-171830/21.
DR
XX      Replication of DNA - useful in genetic engineering and medical
PT
PT      applications.
PS
PS      Disclosure: Page 20; 20pp; Japanese.
XX
XX      The sequence is given in the disclosure to illustrate the invention
CC
CC      Sequence 27 BP; 27 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
    Query Match          0.3%; Score 19; DB 1; Length 27;
    Best Local Similarity 81.5%; Pred. No. 2.8e+02;
    Matches 22; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
OY      5389 AATTAAATAATACAAAAAGAAAAA 5415
        ||||| | | | | | | | | | |
DB      1 AAAAAAAAAAAAAAAAAAAAAAAAAA 27

RESULT 137
AAF99706/C
ID      AAF99706 standard; DNA; 27 BP.
XX
XX      AAF99706;
AC
XX
XX      12-JUN-2001 (first entry)
DT
DE      Immunostimulatory nucleic acid #822.
XX
XX
XX      Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KW      immunostimulatory; tumour; viral infection; bacterial infection;
KW      fungal infection; parasitic infection; cancer; asthma;
KW      infectious disease; allergy; immune deficiency; phosphorochloate; ss.
XX
XX      Synthetic.
XX

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XX XX      WO200122972-A2.
XX PD      05-APR-2001.
XX XX      25-SEP-2000; 2000WO-US026383.
XX PF      25-SEP-1999; 99US-0156113P.
XX PR      27-SEP-1999; 99US-0156135P.
XX PR      23-AUG-2000; 2000US-0227436P.
XX XX      (IOWA ) UNIV IOWA RES FOUND.
XX PA      (COLBY-) COLBY PHARM GMEH.
XX PT      Krieg AM, Schetter C, Vollmer J;
XX DR      WPI; 2001-273485/28.
XX XX      Vaccinating against tumors, infectious diseases, allergies and asthma
XX PT      using immunostimulatory Py-rich and TG nucleic acids.
XX PS      Claim 101, Page 56, 338pp, English.
XX XX      The present invention relates to a method for stimulating an immune
XX CC      response. The method comprises administering an immunostimulatory nucleic
XX CC      acid to a non-rodent subject in sufficient quantity to stimulate an
XX CC      immune response. The present sequence is one such immunostimulatory
XX CC      nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
XX CC      (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
XX CC      against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
XX CC      and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
XX CC      haemophilus, campylobacter, clostridium, Escherichia coli and/or
XX CC      stephilotoccus), fungal antigens and/or parasitic antigens. The method is
XX CC      also useful for preventing cancer, asthma, infectious disease, allergy or
XX CC      immune deficiency. The present sequence can also be used to redirect a
XX CC      Th2 to a Th1 immune response and to activate immune cells. Note: the
XX CC      present sequence may have a phosphorothioate backbone
XX SQ      Sequence 27 BP; 0 A; 0 C; 0 G; 27 T; 0 U; 0 Other;
OY      5389 AATTAAAAAATTCAGAAAAAGAAAAA 5415
Db      27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 138
ABST78427/c
ID      ABST78427 standard; DNA; 27 BP.
XX AC      ABST78427;
XX DT      13-DEC-2002 (first entry)
XX DE      Angiogenesis inhibitor oligonucleotide #911.
XX XX      Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
XX KM      tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
XX KM      diabetic retinopathy; retinopathy of prematurity; macular degeneration;
XX KM      corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
XX KM      rubeosis; Osler-Weber Syndrome; myocardial angiogenesis;
XX KM      plaque neovascularisation; telangiectasia; haemophilic joint;
XX KM      angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
XX KM      scleroderma; hypertrophic scar.
XX OS      Synthetic.
XX PN      WO200253141-A2.
XX PD      11-JUL-2002.

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```
PF 14-DEC-2001; 2001WO-US048458.
XX
XX 14-DEC-2000; 2000US-0255534P.
XX
XX (COLE-) COLEY PHARM GROUP INC.
PA
XX Bratzler RL;
PI
XX WPI; 2002-566690/60.
XX
XX Inhibiting angiogenesis in a subject, involves administering at least one
PT antitumorigenic nucleic acid molecule to the subject.
XX
PS Claim 2; Page 35; 276pp; English.
XX
XX The invention relates to inhibiting angiogenesis in a subject, comprising
CC administering at least one antitumorigenic nucleic acid molecule. Also
CC included is a kit comprising a first container housing the antitumorigenic
CC nucleic acids, and instructions for administering them to a subject
CC having a condition characterized by unwanted angiogenesis. The method is
CC useful for inhibiting angiogenesis associated with solid tumour growth,
CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
CC rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
CC neovascularisation, telangiectasia, haemophilic joints, angiodioma,
CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
CC hypertrophic scars. The present sequence is an antitumorigenic nucleic
CC acid of the invention
XX
SQ Sequence 27 BP; 0 A; 0 C; 0 G; 27 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 19; DB 1; Length 27;
XX Best Local Similarity 81.5%; Pred. No. 2.8e+02;
XX Matches 22; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
XX
QY 5389 AATTAAAAAATTCAGAAAAAGAAAAA 5415
DB 27 AAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 139
XX ABL39406/c
XX ID ABL39406 standard; DNA; 27 BP.
XX
XX ABL39406;
AC
XX 16-APR-2002 (first entry)
XX
XX Immunostimulatory nucleic acid SEQ ID NO: 842.
XX
XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
XX
XX angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..27
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate backbone"
XX
XX WO200197843-A2.
XX
XX 27-DEC-2001.
XX
XX 22-JUN-2001; 2001WO-US020154.
XX
XX 22-JUN-2000; 2000US-0213346P.
XX
XX (IOWA ) UNIV IOWA RES FOUND.
XX
XX Weiner G, Hartmann G;
PI
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XX
XX WPI; 2002-154611/20.
XX
XX Treating or preventing cancer, such as basal cell carcinoma, comprises
PT administering immunostimulatory nucleic acids that induce expression of
PT cell surface antigens and antibodies to a subject having or at risk of
PT developing cancer.
XX
XX Disclosure; Page 310; 312pp; English.
XX
XX The present invention relates to methods for treating or preventing
CC cancer, involving administering to a subject having or at risk of
CC developing cancer immunostimulatory nucleic acids that induce expression
CC of cell surface antigens and antibodies. The methods are useful for
CC treating or preventing cancer such as basal cell carcinoma, bladder
CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
CC breast cancer, cervical cancer, colon and rectum cancer, connective
CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
CC present sequence is an immunostimulatory oligonucleotide described in the
CC exemplification of the invention
XX
XX
SQ Sequence 27 BP; 0 A; 0 C; 0 G; 27 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 19; DB 1; Length 27;
XX Best Local Similarity 81.5%; Pred. No. 2.8e+02;
XX Matches 22; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
XX
QY 5389 AATTAAAAAATTCAGAAAAAGAAAAA 5415
DB 27 AAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 140
XX ABK67015/c
XX ID ABK67015 standard; DNA; 27 BP.
XX
XX ABK67015;
AC
XX 02-JUL-2002 (first entry)
XX
XX Human gene specific PCR primer #1103.
XX
XX Primer; ss; DNA microarray; differential expression analysis; human.
XX
XX Homo sapiens.
XX
XX US6352829-B1.
XX
XX 05-MAR-2002.
XX
XX 05-JAN-1999; 99US-00225928.
XX
XX 21-MAY-1997; 97US-00859998.
XX
XX (CLON-) CLONTECH LAB INC.
XX
XX Chenchik A, Jekhadze G, Bibilashvili R;
XX
XX WPI; 2002-314699/35.
XX
XX Producing sub-population of labeled nucleic acids, useful for analyzing
PT differences in RNA profiles between several different physiological
PT sources, using set of distinct gene specific primers.
XX
XX Example 3; SEQ ID NO 1103; 11pp; English.
XX
XX The invention relates to producing a sub-population of labeled nucleic
CC acids (NAs) comprising contacting a NA sample from a physiological
CC source, with a pool of 50 distinct gene specific primers under suitable
```

CC conditions to enzymatically generate sub-population of NAs, where each
CC gene specific primer has a sequence complementary to a distinct mRNA, and
CC each labeled NA is generated using a single gene specific primer. The
CC method is useful for producing a sub-population of labeled NAs which is
CC useful for analyzing the differences in the RNA profiles between several
CC different physiological sources, where the method comprises producing
CC subpopulation of labeled NAs for the different physiological sources,
CC comprising the populations for each physiological source to identify
CC differences in the population, where the comparison is preferably
CC performed by hybridising the labeled NAs for each of the distinct
CC physiological sources to an array of probe NAs stably associated with the
CC surface of a substrate to produce a hybridisation pattern for each of the
CC sources, and comparing the patterns for each of the sources, where
CC differential gene expression assays are utilised in differential
CC expression analysis of diseased or normal tissue e.g. neoplastic a normal
CC tissue, or different tissue or sub-tissue types. The present sequence is a
CC human gene specific PCR primer used in the method of the invention. Note:
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from USPTO
CC at <http://wipo.secdatabase.uspto.gov/sequence.html?docID=635282981>
XX

SO Sequence 27 BP; 6 A; 9 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.3%; Score 19; DB 1; Length 27;
Best Local Similarity 81.5%; Pred. No. 2.8e+02;
Matches 22; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 118 CTTGCAGCTCAAGGTTGATCTCAGCA 144
DB 27 CTTGCCGCTCAGAGATTGAGATGAGCA 1

RESULT 141

ACH03245/c
ID ACH03245 standard; DNA; 27 BP.

XX ACH03245;

XX 25-SEP-2003 (first entry)

XX Immunostimulatory nucleic acid #880.

XX Immunostimulatory; antinflammatory; dermatological; antipsoriatic;

XX anticancer; gene therapy; vaccine; non-allergic inflammatory disease;

XX psoriasis; eczema; allergic contact dermatitis; latex dermatitis;

XX inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.

XX Synthetic.

XX US2003050268-A1.

XX 13-MAR-2003.

XX 29-MAR-2002; 2002US-00112653.

XX 29-MAR-2001; 2001US-0279642P.

XX (KRIG/) KRIG A M.

XX (BERG/) BERG D J.

XX Krieg AM, Berg DJ;

XX WPI; 2003-521815/49.

XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,

XX allergic contact dermatitis, latex dermatitis or inflammatory bowel

XX disease by administering an immunostimulatory nucleic acid.

XX Disclosure, Page 32; 22pp; English.

XX The invention describes a method of treating non-allergic inflammatory

XX disease comprising administering to a subject having or at risk of

XX developing a non-allergic inflammatory disease an immunostimulatory

CC nucleic acid for prevention or treatment of the disease. The method is
CC useful for treating non-allergic inflammatory diseases, such as
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
CC This sequence represents an immunostimulatory nucleic acid
XX

SO Sequence 27 BP; 0 A; 0 C; 0 G; 27 T; 0 U; 0 Other;

Query Match 0.3%; Score 19; DB 1; Length 27;
Best Local Similarity 81.5%; Pred. No. 2.8e+02;
Matches 22; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 5389 AATTAAAAAATACAAAAAGAAAAA 5415
DB 27 AAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 142

ADB37208/c
ID ADB37208 standard; DNA; 27 BP.

XX ADB37208;

XX 04-DEC-2003 (first entry)

XX Immunostimulatory nucleic acid #822.

XX de; allergy; asthma; poly-G nucleic acid; aerosol formulation;

XX hypo-responsive subject; immunostimulatory.

XX Synthetic.

XX US2003067848-A1.

XX 02-FEB-2001; 2001US-00776479.

XX 03-FEB-2000; 2000US-0179991P.

XX (BRAT/) BRATZLER R L.

XX (PETE/) PETERSEN D M.

XX (FOUR/) FOURON Y.

XX Bratzler RL, Petersen DM, Fouron Y;

XX WPI; 2003-657977/62.

XX Treating and/or preventing allergy or asthma using an immunostimulatory

XX nucleic acid alone or in combination with an asthma/allergy medicament.

XX Disclosure, Page 17; 22pp; English.

XX The invention relates to a method of treating or preventing allergy or

XX asthma which comprises administering to a subject a poly-G nucleic acid

XX in an aerosol formulation. The methods and compositions of the present

XX invention are useful for diagnosing and/or treating asthma and allergy

XX especially in a hypo-responsive subject. The present sequence represents

XX an immunostimulatory nucleic acid of the invention.

XX Sequence 27 BP; 0 A; 0 C; 0 G; 27 T; 0 U; 0 Other;

QY 5389 AATTAAAAAATACAAAAAGAAAAA 5415

DB 27 AAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 143

AAH28299/c

```
ID AAH28299 standard; RNA; 22 BP.
XX
AC AAH28299;
XX
DT 05-SEP-2001 (first entry)
XX
DE 3' untranslated region sequence from neuronal cadherin gene.
XX
KM mRNA protein complex; tumour development; cell aging; death;
XX
KW ribonomeic profile; RNA-binding protein; ss.
XX
OS Unidentified.
XX
PN WO200148480-A1.
XX
PD 05-JUL-2001.
XX
PF 28-DEC-2000; 2000MO-US035583.
XX
PR 28-DEC-1999; 99US-0173338P.
XX
PA (KEENE/) KEENE J D.
XX
PI Keene JD, Tenenbaum SA, Carson C;
XX
DR WPI; 2001-425706/45.
XX
PT Partitioning endogenous mRNA-protein complexes in vivo, by contacting
PT sample comprising the complex with ligand that binds to a component of
PT the complex and separating complex by binding ligand with a binding
PT molecule.
XX
PS Example 6; Page 31; 49pp; English.
XX
CC The specification describes a method for partitioning endogenous cellular
CC mRNA-protein (mRNP) complexes. The method comprises contacting a
CC biological sample comprising mRNP complex with ligand that specifically
CC binds a component of mRNP complex, separating mRNP complex by binding the
CC ligand with a molecule specific for ligand, which is attached to the
CC solid support and then collecting the mRNP complex by removing the
CC complex from the support. The method is useful for in vivo partitioning
CC of cellular mRNA protein complexes in a biological sample. The method is
CC useful for determining the ribonomeic profile of a cell which has numerous
CC uses including monitoring of tumour development, state of growth or state
CC of development, perturbations of a biological system such as disease,
CC drug or toxin treatment and the state of cell aging or death.
CC distinguishing ribonomeic profiles among organisms, to discriminate
CC between transcriptional and post-transcriptional contributions to gene
CC expression and to track the movement of RNAs through RNP complexes,
CC including the interactions of combinations of proteins with RNAs in RNP
CC complexes. AAH28281-AAH28316 represent sequences derived from the 3'
CC untranslated region (UTR) of mRNA of various genes. The sequences contain
CC target sequences for RNA-binding proteins
XX
SQ Sequence 22 BP; 2 A; 1 C; 1 G; 0 T; 18 U; 0 Other;
XX
Query Match 0.3%; Score 18.8; DB 1; Length 22;
Best Local Similarity 90.9%; Pred. No. 2.9e+02;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 5394 AAAAAATACAAAAAGAAAAA 5415
DB 22 AAAAAATACGAAAAATAAAAA 1
RESULT 144
AAH28297/c
ID AAH28297 standard; RNA; 22 BP.
XX
AC AAH28297;
XX
DT 05-SEP-2001 (first entry)
XX
```

```
DE 3' untranslated region sequence from neuronal cadherin gene.
XX
KM mRNA protein complex; tumour development; cell aging; death;
XX
KW ribonomeic profile; RNA-binding protein; ss.
XX
OS Unidentified.
XX
PN WO200148480-A1.
XX
PD 05-JUL-2001.
XX
PF 28-DEC-2000; 2000MO-US035583.
XX
PR 28-DEC-1999; 99US-0173338P.
XX
PA (KEENE/) KEENE J D.
XX
PI Keene JD, Tenenbaum SA, Carson C;
XX
DR WPI; 2001-425706/45.
XX
PT Partitioning endogenous mRNA-protein complexes in vivo, by contacting
PT sample comprising the complex with ligand that binds to a component of
PT the complex and separating complex by binding ligand with a binding
PT molecule.
XX
PS Example 6; Page 31; 49pp; English.
XX
CC The specification describes a method for partitioning endogenous cellular
CC mRNA-protein (mRNP) complexes. The method comprises contacting a
CC biological sample comprising mRNP complex with ligand that specifically
CC binds a component of mRNP complex, separating mRNP complex by binding the
CC ligand with a molecule specific for ligand, which is attached to the
CC solid support and then collecting the mRNP complex by removing the
CC complex from the support. The method is useful for in vivo partitioning
CC of cellular mRNA protein complexes in a biological sample. The method is
CC useful for determining the ribonomeic profile of a cell which has numerous
CC uses including monitoring of tumour development, state of growth or state
CC of development, perturbations of a biological system such as disease,
CC drug or toxin treatment and the state of cell aging or death.
CC distinguishing ribonomeic profiles among organisms, to discriminate
CC between transcriptional and post-transcriptional contributions to gene
CC expression and to track the movement of RNAs through RNP complexes,
CC including the interactions of combinations of proteins with RNAs in RNP
CC complexes. AAH28281-AAH28316 represent sequences derived from the 3'
CC untranslated region (UTR) of mRNA of various genes. The sequences contain
CC target sequences for RNA-binding proteins
XX
SQ Sequence 22 BP; 2 A; 1 C; 1 G; 0 T; 18 U; 0 Other;
XX
Query Match 0.3%; Score 18.8; DB 1; Length 22;
Best Local Similarity 90.9%; Pred. No. 2.9e+02;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 5394 AAAAAATACAAAAAGAAAAA 5415
DB 22 AAAAAATACGAAAAATAAAAA 1
RESULT 145
ADQ14522/c
ID ADQ14522 standard; RNA; 22 BP.
XX
AC ADQ14522;
XX
DT 23-SEP-2004 (first entry)
XX
DE Neuronal-cadherin 3'-UTR consensus sequence SEQ ID NO:17.
XX
KM metabolic state; mRNA protein complex; mRNP complex; RNA binding protein;
KM mRNA complex-associated protein; mRNP complex-associated protein;
KM mRNA target; protein target; physiological pathway;
KM neuronal-cadherin 3'-UTR consensus sequence; ss.
```

```
XX OS Synthetic.
XX PN WO2004057032-A1.
XX PD 08-JUL-2004.
XX PF 04-DEC-2003; 2003WO-US038475.
XX PR 04-DEC-2002; 2002US-00309788.
XX PA (RIBO-) RIBONOMICS INC.
XX PI Keene JD, Tenenbaum SA, Carson CC, Phelps WC;
XX WPI, 2004-525445/50.
XX DR
XX PT Assessing the metabolic state of a cell comprises isolating at least one
XX MRNP complex comprising at least one RNA binding protein, and at least
XX one mRNA or at least one MRNP complex-associated protein.
XX PS Example 4; SEQ ID NO 17, 86bp; English.
XX CC The present invention describes a method for assessing the metabolic
XX state of a cell. The method comprises isolating at least one MRNP complex
XX having at least one RNA binding protein, and at least one mRNA or at
XX least one MRNP complex-associated protein, and determining the expression
XX level of the mRNA or MRNP complex-associated protein, where the level of
XX expression of the at least one mRNA or the at least one MRNP complex-
XX associated protein is indicative of the metabolic state of the cell. The
XX method can be used for assessing the metabolic state in a cell, and for
XX identifying and evaluating mRNA and protein targets associated with MRNP
XX complexes and implicated in the expression of proteins involved in common
XX physiological pathways. The present sequence represents a neuronal-
XX cadherin 3'-UTR consensus sequence, which is used in an example from the
XX present invention.
XX SQ Sequence 22 BP; 2 A; 1 C; 1 G; 0 T; 18 U; 0 Other;
XX
XX Query Match 0.3%; Score 18.8; DB 1; Length 22;
XX Best Local Similarity 90.9%; Pred. No. 2.9e+02;
XX Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 5394 AAAAAATACGAAAAATGAAAAA 5415
XX |||||
XX DB 22 AAAAAATACGAAAAATGAAAAA 1
XX
XX RESULT 146
XX ADQ14524/C
XX ID ADQ14524 standard; RNA; 22 BP.
XX AC ADQ14524;
XX XX
XX DT 23-SEP-2004 (first entry)
XX DE Neuronal-cadherin 3'-UTR consensus sequence SEQ ID NO:19.
XX XX
XX KM metabolic state; mRNA protein complex; MRNP complex; RNA binding protein;
XX KM mRNA complex-associated protein; MRNP complex-associated protein;
XX KM mRNA target; protein target; physiological pathway;
XX KM neuronal-cadherin 3'-UTR consensus sequence; ss.
XX PA (RIBO-) RIBONOMICS INC.
XX OS Synthetic.
XX PN WO2004057032-A1.
XX PD 08-JUL-2004.
XX PF 04-DEC-2003; 2003WO-US038475.
XX PR 04-DEC-2002; 2002US-00309788.
XX PS Example 4; Page 35; 86bp; English.
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PA (RIBO-) RIBONOMICS INC.
XX PI Keene JD, Tenenbaum SA, Carson CC, Phelps WC;
XX WPI, 2004-525445/50.
XX DR
XX PT Assessing the metabolic state of a cell comprises isolating at least one
XX MRNP complex comprising at least one RNA binding protein, and at least
XX one mRNA or at least one MRNP complex-associated protein.
XX PS Example 4; SEQ ID NO 19, 86bp; English.
XX CC The present invention describes a method for assessing the metabolic
XX state of a cell. The method comprises isolating at least one MRNP complex
XX having at least one RNA binding protein, and at least one mRNA or at
XX least one MRNP complex-associated protein, and determining the expression
XX level of the mRNA or MRNP complex-associated protein, where the level of
XX expression of the at least one mRNA or the at least one MRNP complex-
XX associated protein is indicative of the metabolic state of the cell. The
XX method can be used for assessing the metabolic state in a cell, and for
XX identifying and evaluating mRNA and protein targets associated with MRNP
XX complexes and implicated in the expression of proteins involved in common
XX physiological pathways. The present sequence represents a neuronal-
XX cadherin 3'-UTR consensus sequence, which is used in an example from the
XX present invention.
XX SQ Sequence 22 BP; 2 A; 1 C; 1 G; 0 T; 18 U; 0 Other;
XX
XX Query Match 0.3%; Score 18.8; DB 1; Length 22;
XX Best Local Similarity 90.9%; Pred. No. 2.9e+02;
XX Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 5394 AAAAAATACGAAAAATGAAAAA 5415
XX |||||
XX DB 22 AAAAAATACGAAAAATGAAAAA 1
XX
XX RESULT 147
XX ADQ14562/C
XX ID ADQ14562 standard; RNA; 22 BP.
XX AC ADQ14562;
XX XX
XX DT 23-SEP-2004 (first entry)
XX DE Neuronal-cadherin 3'-UTR consensus sequence.
XX XX
XX KM metabolic state; mRNA protein complex; MRNP complex; RNA binding protein;
XX KM mRNA complex-associated protein; MRNP complex-associated protein;
XX KM mRNA target; protein target; physiological pathway;
XX KM neuronal-cadherin 3'-UTR consensus sequence; ss.
XX PA (RIBO-) RIBONOMICS INC.
XX OS Synthetic.
XX PN WO2004057032-A1.
XX PD 08-JUL-2004.
XX PF 04-DEC-2003; 2003WO-US038475.
XX PR 04-DEC-2002; 2002US-00309788.
XX PS Example 4; Page 35; 86bp; English.
```

CC	The present invention describes a method for assessing the metabolic state of a cell.
XX	
CC	The method comprises isolating at least one mRNA complex having at least one RNA binding protein, and at least one mRNA or at least one mRNP complex-associated protein, and determining the expression level of the mRNA or mRNP complex-associated protein, where the level of expression of the at least one mRNA or the at least one mRNP complex-associated protein is indicative of the metabolic state of the cell.
CC	The method can be used for assessing the metabolic state in a cell, and for identifying and evaluating mRNA and protein targets associated with mRNP complexes and implicated in the expression of proteins involved in common physiological pathways.
CC	The present sequence represents a neuronal-cadherin 3'-UTR consensus sequence, which is used in an example from the present invention.
CC	
XX	
SQ	Sequence 22 BP; 2 A; 1 C; 1 G; 0 T; 18 U; 0 Other;
Query Match	0.3%; Score 18.8; DB 1; Length 22;
Best Local Similarity	90.9%; Pred. No. 2.9e+02;
Matches 20; Conservative	0; Mismatches 2; Indels 0; Gaps 0
Dy	5394 AAAAAATACAAAAGAAAAA 5415 Db 22 AAAAAATTACGAAATTAATAA 1
RESULT 148	
ID ADQ14560/c	
ID ADQ14560 standard; RNA; 22 BP.	
XX	
ADQ14560;	
XX	
23-SEP-2004 (first entry)	
XX	
Neuronal-cadherin 3' -UTR consensus sequence.	
DE	
XX	
KM metabolic state; mRNA protein complex; mRNP complex; RNA binding protein;	
KW mRNA complex-associated protein; mRNP complex-associated protein;	
KX mRNA target; protein target; physiological pathway;	
XX neuronal-cadherin 3' -UTR consensus sequence; ss.	
XX	
OS Synthetic.	
XX	
PN WO2004057032-A1.	
XX	
PD 08-JUL-2004.	
XX	
PF 04-DEC-2003; 2003WO-US038475.	
XX	
PR 04-DEC-2002; 2002US-00309788.	
XX	
PA (RIBO-) RIBONOMICS INC.	
XX	
PI Keene JD, Tenenbaum SA, Carson CC, Phelps WC;	
XX	
DR WPI; 2004-525445/50.	
XX	
PT Assessing the metabolic state of a cell comprises isolating at least one mRNP complex comprising at least one RNA binding protein, and at least one mRNA or at least one mRNP complex-associated protein.	
XX	
PS Example 4; Page 35; 86pp; English.	
XX	
CC The present invention describes a method for assessing the metabolic state of a cell.	
CC The method comprises isolating at least one mRNP complex having at least one RNA binding protein, and at least one mRNA or at least one mRNP complex-associated protein, and determining the expression level of the mRNA or mRNP complex-associated protein, where the level of expression of the at least one mRNA or the at least one mRNP complex-associated protein is indicative of the metabolic state of the cell.	
CC The method can be used for assessing the metabolic state in a cell, and for identifying and evaluating mRNA and protein targets associated with mRNP complexes and implicated in the expression of proteins involved in common physiological pathways.	
CC The present sequence represents a neuronal-cadherin 3'-UTR consensus sequence, which is used in an example from the present invention.	

```

CC      physiological pathways. The present sequence represents a neuronal-
CC      cadherin 3'-UTR consensus sequence, which is used in an example from the
CC      present invention.
XX
SQ      Sequence 22 BP; 2 A; 1 C; 1 G; 0 T; 18 U; 0 Other;
OY
  Query Match      0.3%; Score 18.8; DB 1; Length 22;
  Best Local Similarity 90.9%; Pred. No. 2.9e+02;
  Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0.
  5394  AAAAAAAAAAGAAAAA 5415
  22  AAAAAAAAAATGAAAAA 1
  Db
RESULT 149
AAV12482
ID  AAV12482 standard; DNA; 26 BP.
AC  AAV12482;
XX
DT  15-MAY-1998 (first entry)
XX
DE  Oligonucleotide SEQ ID NO:5 from US5174320 Example 2.
XX
XX      Synthesis; selection; amplification; circular oligonucleotide;
XX      rolling circle synthesis; diagnosis; therapeutic agent; ss.
XX      Synthetic.
XX      US5714320-A.
XX      03-FEB-1998.
XX      23-FEB-1995; 95US-00393439.
XX      15-APR-1993; 93US-00047860.
XX      (UNRP ) UNIV ROCHESTER.
XX      Kool ET;
XX      WPI: 1998-144278/13.
XX
XX      Rolling circle synthesis of oligo:nucleotide(s) - using primed circular
XX      template to produce oligonucleotide multimer for cleavage.
XX
XX      Example 2; Col 45; 38pp; English.
PS
XX
CC      The present sequence represents an oligonucleotide used in an example of
CC      the present invention. The present invention describes a method for
CC      synthesizing a selected oligonucleotide (I) having well defined ends. The
CC      method comprises: (a) annealing a primer to a single-stranded (ss)
CC      circular template to yield a primed circular template, where the template
CC      comprises: (1) at least one nucleotide sequence complementary to (1); and
CC      (11) at least one nucleotide effective to produce a cleavage site in the
CC      oligonucleotide multimer; (b) combining the primed circular template with
CC      at least two types of nucleotide triphosphates and a polymerase enzyme
CC      without the addition of auxiliary proteins to yield a ss oligonucleotide
CC      multimer complementary to the circular oligonucleotide template.
CC      comprising multiple copies of (1); and (c) cleaving the oligonucleotide
CC      multimer at the cleavage site to produce (1) having well defined ends.
CC      The method is used for the large-scale synthesis of DNA and RNA oligomers
CC      for use, e.g. as probes and diagnostic agents and/or therapeutic agents
XX
SQ      Sequence 26 BP; 24 A; 2 C; 0 G; 0 T; 0 U; 0 Other;
OY
  Query Match      0.3%; Score 18.8; DB 1; Length 26;
  Best Local Similarity 90.9%; Pred. No. 3e+02;
  Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0.
  5393  AAAAAAAAAAGAAAAA 5414
  11  AAAAAAAAAATGAAAAA 1

```

Db 5 AAAAAAAAAAAAAAAAAAAAAA 26

RESULT 150

AAVS9215 standard; DNA; 26 BP.

AAVS9215;

14-DEC-1998 (first entry)

Circular template for linear oligomer dt12.

ss; circular; cyclic; RNA oligonucleotide; probe; standard; diagnostic; therapeutic agent.

Synthetic.

Key Location/Qualifiers

misc_binding

/tag= a /note= "Position 1 optionally bound to position 26"

/tag= b /note= "Position 26 optionally bound to position 1"

MO9838300-A1.

03-SEP-1998.

26-FEB-1998; 98WO-US003784.

26-FEB-1997; 97US-00805631.

(UYRP) UNIV ROCHESTER.

Kool ET;

WPI; 1998-481202/41.

Synthesis of oligonucleotide(s) - using a single-stranded circular oligonucleotide template comprising at least one copy of a nucleotide sequence complementary to the sequence of the desired RNA oligonucleotide with at least 2 types of ribonucleotide triphosphate and a polymerase enzyme to yield a single-stranded RNA oligonucleotide multimer complementary to the circular oligonucleotide template, where the RNA oligonucleotide multimer comprises multiple copies of the desired RNA oligonucleotide. The methods can be used for producing RNA oligonucleotides having a specific sequence and well defined ends. The RNA oligonucleotides produced can be used as probes, standards and diagnostic or therapeutic agents. They can be used for modifying the structure or function of a target molecule. They can also be used to cleave disease-associated RNA, DNA or protein

Example 2; Page 36; 100pp; English.

The circular template was used for the synthesis of the oligomer dt12 in an example of the method of the invention for synthesizing an RNA oligonucleotide, comprising combining a single-stranded circular oligonucleotide template comprising at least one copy of a nucleotide sequence complementary to the sequence of the desired RNA oligonucleotide with at least 2 types of ribonucleotide triphosphate and a polymerase enzyme to yield a single-stranded RNA oligonucleotide multimer complementary to the circular oligonucleotide template, where the RNA oligonucleotide multimer comprises multiple copies of the desired RNA oligonucleotide. The methods can be used for producing RNA oligonucleotides having a specific sequence and well defined ends. The RNA oligonucleotides produced can be used as probes, standards and diagnostic or therapeutic agents. They can be used for modifying the structure or function of a target molecule. They can also be used to cleave disease-associated RNA, DNA or protein

Sequence 26 BP; 24 A; 2 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.3%; Score 18.8; DB 1; Length 26;

Best Local Similarity 90.9%; Pred. No. 3e+02; 2; Indels 0; Gaps 0;

Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

5393 AAAAAAAAAAAAAAAAAAAAAA 5414

5 AAAAAAAAAAAAAAAAAAAAAA 26

RESULT 151

AA330018 standard; DNA; 26 BP.

AA330018;

16-JUN-1999 (first entry)

Precircle DNA oligonucleotide SEQ ID NO:5.

Multimer; probe; diagnosis; synthesis; detection; polymerase; ss.

Synthetic.

MO9909216-A2.

25-FEB-1999.

13-AUG-1998; 98WO-US016776.

13-AUG-1997; 97US-00910632.

(UYRP) UNIV ROCHESTER.

Kool ET;

WPI; 1999-181062/15.

New detectably labelled oligonucleotide multimer, comprising multiple contiguous copies of a repeated oligonucleotide - useful for detecting target molecules in diagnosis and medicinal applications.

Example 2; Page 41; 103pp; English.

The present invention describes a detectably labelled oligonucleotide multimer, comprising multiple contiguous copies of a repeated oligonucleotide. The detectably labelled oligonucleotide multimer is useful for detecting a target molecule. Oligonucleotide multimers may be produced in sufficient quantity to be useful for affinity labelling of proteins, and for signal amplification in highly sensitive affinity capture and sequence identification applications. The method provides a faster, cheaper and simpler way for large-scale production of DNA and RNA oligomers and multimers. The incorporation of labels enables the oligonucleotide multimers to be useful in diagnostics and medicine. The present sequence represents an oligonucleotide used in an example from the present invention

Sequence 26 BP; 24 A; 2 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.3%; Score 18.8; DB 1; Length 26;

Best Local Similarity 90.9%; Pred. No. 3e+02; 2; Indels 0; Gaps 0;

Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

5393 AAAAAAAAAAAAAAAAAAAAAA 5414

5 AAAAAAAAAAAAAAAAAAAAAA 26

RESULT 152

ADC65872 standard; DNA; 26 BP.

ADC65872;

18-DEC-2003 (first entry)

DNA oligonucleotide #5.

RNA oligonucleotide synthesis; ribonucleotide triphosphate; polymerase; electroporation; calcium phosphate treatment; lipid-mediated delivery;

cation-mediated delivery; bacterial infection; viral infection; drug resistant infection; double stranded DNA oligomer; ss.

```
XX OS Synthetic.
XX PN US2003087241-A1.
XX PD 08-MAY-2003.
XX PF 30-NOV-2001; 2001US-00997931.
XX PR 15-APR-1993; 93US-00047860.
XX PR 23-FEB-1995; 95US-00393439.
XX PR 26-FEB-1997; 97US-00805631.
XX PR 11-MAY-2000; 2000US-00569344.
XX PA (UYRP ) UNITV ROCHESTER.
XX PI Kool ET;
XX PN WPI; 2003-755141/71.
XX DR
XX PT Synthesizing RNA oligonucleotide involves combining single-stranded
XX PT circular oligonucleotide, ribonucleotide triphosphate and polymerase
XX PT enzyme to yield desired RNA complementary to circular oligonucleotide
XX PT template.
XX PS Example 2; SEQ ID NO 5; 78bp; English.
XX CC The invention relates to a method for synthesizing an RNA
XX CC oligonucleotide, comprising combining a single-stranded circular
XX CC oligonucleotide template with at least two types of ribonucleotide
XX CC triphosphate and a polymerase enzyme to yield a single-stranded RNA
XX CC oligonucleotide multimer complementary to the circular oligonucleotide
XX CC template, where the RNA oligonucleotide multimer comprises multiple
XX CC copies of the desired RNA oligonucleotide. The method is useful for
XX CC synthesizing an RNA oligonucleotide with well-defined ends. The circular
XX CC oligonucleotide is introduced into the cell using direct injection, or
XX CC electroporation, calcium phosphate treatment, lipid-mediated delivery, or
XX CC action-mediated delivery. The method is useful for treating bacterial
XX CC and/or viral infections in mammals, particularly drug resistant
XX CC infections, and for producing double stranded DNA oligomers. The method
XX CC is performed in the absence of an oligonucleotide primer, or without the
XX CC addition of auxiliary proteins. This sequence represents an
XX CC oligonucleotide used in the method of the invention.
XX CC
XX SQ Sequence 26 BP; 24 A; 2 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 18.8; DB 1; Length 26;
XX Best Local Similarity 90.9%; Pred. No. 3e+02; Mismatches 0; Gaps 0;
XX Matches 20; Conservative 0; Indels 0;
XX
XX QY 5393 AAAAAAAAAACAAAAAGAAAAA 5414
XX | | | | | | | | | | | | | |
XX 5 AAAAAAAAAACAAAAAGAAAAA 26
XX
XX Db
XX
XX RESULT 153
XX ABN13299
XX ID ABN13299 standard; DNA; 25 BP.
XX AC ABN13299;
XX
XX DT 29-MAY-2002 (first entry)
XX
XX DB Human GDMLP-1 25-mer scanning SEQ ID NO:5 sequence SEQ ID NO:13291.
XX
XX KW Human; genome-derived myosin-like protein 1; GDMLP-1; heart;
XX KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
XX KW skeletal muscle disorder; amplicon; screening; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO200192524-A2.
XX
XX
```

```
PD 06-DEC-2001.
XX
XX PF 25-MAY-2001; 2001WO-US016981.
XX
XX PR 26-MAY-2000; 2000US-0207456P.
XX PR 21-SEP-2000; 2000US-0234687P.
XX PR 27-SEP-2000; 2000US-0236359P.
XX PR 04-OCT-2000; 2000GB-00024263.
XX PR 30-JAN-2001; 2001WO-US000661.
XX PR 30-JAN-2001; 2001WO-US000662.
XX PR 30-JAN-2001; 2001WO-US000663.
XX PR 30-JAN-2001; 2001WO-US000664.
XX PR 30-JAN-2001; 2001WO-US000665.
XX PR 30-JAN-2001; 2001WO-US000666.
XX PR 30-JAN-2001; 2001WO-US000667.
XX PR 30-JAN-2001; 2001WO-US000668.
XX PR 30-JAN-2001; 2001WO-US000669.
XX PR 30-JAN-2001; 2001WO-US000670.
XX PR 05-FEB-2001; 2001US-0266860P.
XX
XX PA (AEOM-) AECOMICA INC.
XX
XX PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
XX PN WPI; 2002-179446/23.
XX
XX DR
XX
XX PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
XX PT or as specific biomolecule capture probes for surface-enhanced laser
XX PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
XX PS Disclosure; SEQ ID NO 13291, 214bp; English.
XX
XX CC The present invention describes a human genome-derived myosin-like
XX CC protein 1 (hGDMLP-1). The protein and vaccine production. The hGDMLP-1
XX CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1
XX CC nucleic acids can be used as probes to detect, characterise and quantify
XX CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to
XX CC provide initial substrates for the recombinant engineering of hGDMLP-1
XX CC protein variants having desired phenotypic improvements, and for
XX CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
XX CC used as immunogens to raise antibodies that specifically recognise hGDMLP
XX CC -1 proteins, as standards in assays used to determine the concentration
XX CC and/or amount specifically of hGDMLP proteins, as specific biomolecule
XX CC capture probes for surface-enhanced laser desorption ionisation, as
XX CC therapeutic supplement in patients having specific deficiency in hGDMLP-1
XX CC production, and in vaccines or for replacement therapy. The
XX CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
XX CC disorder associated with the expression of hGDMLP-1, in particular heart
XX CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
XX CC The present sequence represents an oligomer used in the screening of the
XX CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
XX CC The sequence data for this patent did not form part of the printed
XX CC specification, but was obtained in electronic format directly from WIPO
XX CC at ftp.wipo.int/pub/published_pct_sequence
XX
XX SQ Sequence 25 BP; 9 A; 3 C; 10 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 18.6; DB 1; Length 25;
XX Best Local Similarity 84.0%; Pred. No. 3.2e+02;
XX Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 3475 AGCAGACGGAACCAAGTGTGATGA 3499
XX | | | | | | | | | | | | | |
XX 1 AGCAGAGTGAAACCAAGTGTGAGGA 25
XX
XX Db
XX
XX RESULT 154
XX ABV80872
XX ID ABV80872 standard; DNA; 25 BP.
XX AC ABV80872;
XX
XX DT 03-JAN-2003 (first entry)
XX
```


DE	Human HTPL scanning oligonucleotide SEQ ID 2118.
XX	
KW	Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW	human testis expressed Patched like protein; testis; adrenal; liver;
KM	male germ cell development; bone marrow; brain; kidney; lung; placenta;
KV	prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX	
OS	Homo sapiens.
XX	
PV	EPI229046-A2.
XX	
PD	07-AUG-2002.
XX	
FP	28-JAN-2002; 2002EP-00001167.
XX	
PR	30-JAN-2001; 2001WO-US000663.
PR	30-JAN-2001; 2001WO-US000664.
PR	30-JAN-2001; 2001WO-US000665.
PR	30-JAN-2001; 2001WO-US000667.
PR	30-JAN-2001; 2001WO-US000668.
PR	30-JAN-2001; 2001WO-US000669.
PR	23-MAY-2001; 2001US-00864761.
PR	09-OCT-2001; 2001US-0327898P.
XX	
PA	(AEOM-) AEOMICA INC.
P1	Zhan J;
XX	
DR	WPI, 2002-676582/73.
XX	
PT	Novel isolated human testis expressed Patched like protein (HTPL), useful
PT	for identifying agonist and antagonist and specific binding partners, and
PT	for treating subjects having defects in HTPL.
PS	Example 2; Page 341; 718bp; English.
XX	
CC	The present invention relates to human testis expressed Patched like
CC	protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL
CC	has two isoforms, with a few single base pair differences between the
CC	two. One of the single base pair changes introduces a premature stop
CC	codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC	shares an overall structure organisation with the Patched protein. The
CC	shared structural features strongly imply that HTPL plays a role similar
CC	to that of Patched, and is a potential tumour suppressor. HTPL is
CC	important in regulating male germ cell development, and the HTPL gene was
CC	mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC	useful for diagnosing a disorder caused by mutation in HTPL, and in
CC	therapy and manufacture of a medicament for treatment or prevention of
CC	such disorder associated with decreased expression or activity of human
CC	HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC	foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC	skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC	clinically useful diagnostic markers and potential therapeutic agents for
CC	male infertility and cancer. The present oligonucleotide was used in an
CC	example from the invention
XX	
SQ	Sequence 25 BP; 4 A; 10 C; 11 G; 0 T; 0 U; 0 Other;
OY	Query Match 0.3%; Score 18.6; DB 1; Length 25;
Dd	Best Local Similarity 84.0%; Pred. No. 3.2e+02;
	Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0.
	770 GCGCCAGGCCGAGAGGGGCAGG 794
	1 GAGCCCAAGCCGACGGCGGGCCGG 25
RESULT 155	
AB875627	
ID	AB875627 standard; DNA; 25 BP.
AC	AB875627;

XX	27-DEC-2002	(first entry)
DT		
XX		
XX	Human PAP-Ba associated 25-mer SEQ ID 1153.	
DE		
XX	PAP-B; human; pregnancy associated plasma protein B; abortive;	
KW	contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;	
KW	dysgenetic pregnancy; primer; ss.	
OS	Homo sapiens.	
XX		
XX	US2002102252-A1.	
PN		
XX		
XX	01-AUG-2002.	
PD		
PF	06-APR-2001; 2001US-00827998.	
PR		
XX	26-MAY-2000; 2000US-0207456P.	
XX		
PA	(GUY/) GU Y.	
XX	(SHAN/) SHANNON M E.	
XX		
PI	Gu Y, Shannon ME;	
XX		
XX		
DR	WPI; 2002-697817/75.	
XX		
PT	New isolated nucleic acid encoding an isoform of human pregnancy	
XX	associated plasma protein B, for preventing or aborting pregnancy.	
XX		
PS	Example 2; Page 226; 353pp; English.	
XX		
CC	This invention describes a novel isolated nucleic acid that encodes one	
CC	of three new isoforms of human pregnancy associated plasma protein B,	
CC	hPAP-B. The products of the invention have abortive and contraceptive	
CC	activity and can be used for gene therapy or in a vaccine. The nucleic	
CC	acid, polypeptide encoded by it, or antibody to the polypeptide can be	
CC	used in pharmaceutical compositions or vaccines for preventing or	
CC	aborting pregnancy. PAP-B is used in the antenatal diagnosis of	
CC	dysgenetic pregnancies. The nucleic acids are used as probes to assess	
CC	the level of PAP-B isoform mRNA in chorionic villus samples, and the	
CC	antibodies can be used to assess the expression levels of PAP-B isoform	
CC	proteins in chorionic villus samples, to diagnose dysgenetic pregnancies	
CC	antenatally. This sequence represents an oligomer used in scanning the	
CC	human PAP-B genes described in the disclosure of the invention	
XX		
XX		
SQ	Sequence 25 BP; 16 A; 0 C; 5 G; 4 T; 0 U; 0 Other;	
	Query Match 0.3%; Score 18.6; DB 1; Length 25;	
	Best Local Similarity 84.0%; Pred. NO. 3.2e+02;	
	Matches 21; Conservative 0; Mismatches 4; Indels 0; Gaps 0;	
OY	5410 AAAAAATGAATAAAGGATTAAGA 5434	
DDB	1 AAGAAATGAAATTTAGAGATTAGA 25	
	RESULT 156	
	ACC45214/C	
ID	ACC45214 standard; DNA; 20 BP.	
XX		
XX	ACC45214;	
XX		
DT	16-JUN-2003 (first entry)	
XX		
DE	Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:74.	
XX		
KW	Human; cytosolic; neurotropic; neuroprotective; antiinflammatory;	
KW	antisense therapy; NAC; DERCAP; hyperproliferative disease; apoptosis;	
KW	death effector filament-forming CED4-like apoptosis protein;	
KW	neurological disease; infection; inflammation; tumour formation;	
KW	phosphorothioate; ss.	
XX		
OS	Homo sapiens.	

OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
PN WO2003024988-A1.
XX
XX 27-MAR-2003.
XX
XX 19-SEP-2002; 2002WO-US029664.
XX PF
XX 19-SEP-2001; 2001US-00956712.
XX PR
XX (ISIS-) ISIS PHARM INC.
XX PA
XX Bennett CF, Freiler SM;
PI
XX WPI; 2003-354583/33.
XX
PT New antisense compounds, useful for modulating the expression of NAC or
PT for treating a disease or condition associated with the expression of
PT NAC, e.g. hyperproliferative disease or neurological disease.
XX
PS Claim 3; Page 76; 147pp; English.
XX
XX The present invention describes a compound (1) 8-50 nucleobases in length
XX targeted to a nucleic acid molecule encoding NAC, where the compound
XX specifically hybridizes with the nucleic acid molecule encoding NAC and
XX inhibits the expression of NAC. The compound specifically hybridizes with
XX at least an 8-nucleobase portion of an active site on a nucleic acid
XX molecule encoding NAC. Also described: (1) a composition comprising (1)
XX and a pharmaceutical carrier or diluent; (2) inhibiting the expression of
XX NAC in cells or tissues comprising contacting the cells or tissues with
XX (1); and (3) treating an animal having a disease or condition associated
XX with NAC comprising administering (1) to the animal so that expression of
XX NAC is inhibited. (1) has cytostatic, neurotropic, neuroprotective and
XX antiinflammatory activities, and can be used in antisense therapy. The
XX antisense compounds (1) are useful for modulating the expression of NAC,
XX and for treating a disease or condition associated with expression of
XX NAC, e.g. hyperproliferative disease, neurological disease, or a disease
XX or disorder arising from aberrant apoptosis. The compounds are also
XX useful as research reagents and kits, or for diagnostics, therapeutics
XX and prophylaxis, e.g. to prevent or delay infection, inflammation or
XX tumour formation. NAC is also known as a death effector filament-forming
XX CED4-like apoptosis protein (DEFCAP). NAC is located on human chromosome
XX 17p13. The present sequence represents a human NAC chimeric
XX phosphorothioate antisense oligonucleotide, which is given in the
XX exemplification of the present invention
SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.3%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3466 CTCATCTTACGACGCGAA 3485
DB 20 CTCATCTTACGACGCGTA 1

ID AAQ20032 standard; DNA; 22 BP.
XX
AC AAQ20032;
XX
DT 01-APR-1992 (first entry)
XX
XX Cross-linking oligomer 212 for targeting human TNF.
XX
XX deoxyribonucleic acid; major groove; ethanamine group;
XX aziridinyletosine; cross-linking group; tumour necrosis factor; ss.
XX
OS Synthetic.
FH Key Location/Qualifiers
FT modified_base 1
FT /tag= a
FT /mod_base= OTHER
FT /note= "N4N4-ethanocytosine"
FT modified_base 2
FT /tag= b
FT /mod_base= OTHER
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT modified_base 3
FT /tag= c
FT /mod_base= OTHER
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT modified_base 4
FT /tag= d
FT /mod_base= OTHER
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT modified_base 7
FT /tag= e
FT /mod_base= m5c
FT modified_base 9
FT /tag= f
FT /mod_base= m5c
FT modified_base 11
FT /tag= g
FT /mod_base= m5c
FT modified_base 13
FT /tag= h
FT /mod_base= m5c
FT modified_base 15
FT /tag= i
FT /mod_base= m5c
FT modified_base 17
FT /tag= j
FT /mod_base= m5c
FT modified_base 21
FT /tag= k
FT /mod_base= m5c
PN WO9118997-A.
XX
XX 12-DEC-1991.
XX
XX 25-MAY-1990; 90US-00529346.
XX PF
XX 25-MAY-1990; 90US-00529346.
XX PR
XX 14-JAN-1991; 91US-00640654.
XX
XX (GILE-) GILEAD SCIE INC.
XX
XX Matteucci MD, Krawczyk S;
XX
XX WPI; 1992-007480/01.
XX
XX New sequence-specific non-photo-activated crosslinking agents - bind to
XX the major groove of duplex DNA and are esp. useful for treating latent
XX infections e.g. HIV.
XX
PS Example 4; Page 25; 42pp; English.

CC The sequence is designed to target the Human tumour necrosis factor
 CC beginning at nucleotide 1137 and to covalently cross-link to it via the
 CC N4N4-ethanocytosine group. See also AAQ20031-Q20038
 XX
 SQ Sequence 22 BP; 3 A; 8 C; 0 G; 11 T; 0 U; 0 Other;
 Query Match 0.3%; Score 18.4; DB 1; Length 22;
 Best Local Similarity 95.0%; Pred. No. 3.3e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1182 AGAAGAGAGAGAGAGAAAT 1201
 Db 22 AGAAGAGAGAGAGAGAAAT 3
 RESULT 158
 ID AAQ30380/c
 XX AAQ30380 standard; DNA; 22 BP.
 AC AAQ30380;
 XX
 DT 25-MAR-2003 (revised)
 DT 07-DEC-1992 (first entry)
 XX
 DE Oligomer TNP211 for forming triplex with HUMTNFAA target duplex.
 XX Tumour necrosis factor; herpes simplex; AIDS; modified; HIV; RSV; HPV;
 KM malignancy; hepatitis; inflammation; ss.
 OS
 XX Synthetic.
 FH Key
 FT modified_base 1 Location/Qualifiers
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
 FT 2
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
 FT 3
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
 FT 4
 FT /tag= d
 FT /mod_base= OTHER
 FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
 FT 7
 FT /tag= e
 FT /mod_base= m5c
 FT 9
 FT /tag= f
 FT /mod_base= m5c
 FT 11
 FT /tag= g
 FT /mod_base= m5c
 FT 13
 FT /tag= h
 FT /mod_base= m5c
 FT 15
 FT /tag= i
 FT /mod_base= m5c
 FT 17
 FT /tag= j
 FT /mod_base= m5c
 FT 21
 FT /tag= k
 FT /mod_base= m5c
 XX
 PN WO9209705-A1.
 XX
 PD 11-JUN-1992.

XX
 PF 25-NOV-1991; 91WO-US008811.
 XX
 PR 23-NOV-1990; 90US-00617907.
 PR 18-JUN-1991; 91US-00643382.
 PR 08-APR-1991; 91US-00683420.
 PR 17-APR-1991; 91US-00686544.
 PR 17-APR-1991; 91US-00686546.
 PR 17-APR-1991; 91US-00686547.
 PR 27-SEP-1991; 91US-00766733.
 XX
 PA (GILE-) GILEAD SCI INC.
 XX
 PI Froehner B, Krawczyk S, Matteucci MD, Milligan J;
 XX
 DR WPI, 1992-217083/26.
 XX
 PT New oligomers contg. modified bases - which form a triplex with G-C
 PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
 PT herpes malignancy and inflammation.
 XX
 PS Claim 12; Page 70; 77pp; English.
 XX
 CC The synthetic oligomer is capable of forming a triplex at physiological
 CC pH with a purine rich target sequence by coupling into the major groove
 CC of the duplex. The specific target sequence of this oligomer is the human
 CC tumour necrosis factor beginning at nucleotide 1137 contg. a purine rich
 CC sequence concd. on one strand of the duplex. The oligomer, and others
 CC like it are useful in diagnosis and therapy of diseases characterised by
 CC specific DNA duplex targets, e.g. HPV; HSR; HIV; hepatitis B, herpes,
 CC malignant tumours and inflammation. The triple helices form under mild
 CC conditions thus assays may be carried out without subjecting the test
 CC specimen to harsh conditions. See also AAQ25452-25501 and AAQ30226-448.
 CC (Updated on 25-MAR-2003 to correct PN field.)
 XX
 SQ Sequence 22 BP; 4 A; 7 C; 0 G; 11 T; 0 U; 0 Other;
 Query Match 0.3%; Score 18.4; DB 1; Length 22;
 Best Local Similarity 95.0%; Pred. No. 3.3e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1182 AGAAGAGAGAGAGAGAAAT 1201
 Db 22 AGAAGAGAGAGAGAGAAAT 3
 RESULT 159
 ID AAQ30381/c
 XX AAQ30381 standard; DNA; 22 BP.
 AC AAQ30381;
 XX
 DT 25-MAR-2003 (revised)
 DT 07-DEC-1992 (first entry)
 XX
 DE Oligomer TNP212 for forming triplex with HUMTNFAA target duplex.
 XX Tumour necrosis factor; herpes simplex; AIDS; modified; HIV; RSV; HPV;
 KM malignancy; hepatitis; inflammation; ss.
 OS
 XX Synthetic.
 FH Key
 FT modified_base 1 Location/Qualifiers
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= N4 N4 ethanocytosine"
 FT 2
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
 FT 3
 FT /tag= c
 FT modified_base 3
 FT /tag= c

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FT      /mod_base= OTHER
FT      /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT      4
FT      /tag= d
FT      /mod_base= OTHER
FT      /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT      7
FT      /tag= e
FT      /mod_base= m5c
FT      9
FT      /tag= f
FT      /mod_base= m5c
FT      11
FT      /tag= g
FT      /mod_base= m5c
FT      13
FT      /tag= h
FT      /mod_base= m5c
FT      15
FT      /tag= i
FT      /mod_base= m5c
FT      17
FT      /tag= j
FT      /mod_base= m5c
FT      21
FT      /tag= k
FT      /mod_base= m5c
PN      WO9209705-A1.
XX
XX      11-JUN-1992.
PD
XX
XX      25-NOV-1991; 91WO-US008811.
PF
XX
PR      23-NOV-1990; 90US-00617907.
PR      18-JUN-1991; 91US-00643382.
PR      08-APR-1991; 91US-00683420.
PR      17-APR-1991; 91US-00686544.
PR      17-APR-1991; 91US-00686546.
PR      17-APR-1991; 91US-00686547.
PR      17-SRP-1991; 91US-00766733.
XX
PA      (GILE-) GILEAD SCI INC.
XX
PI      Froehler B, Krawczyk S, Matteucci MD, Milligan J;
XX
XX      MPI; 1992-217083/26.
DR
XX
XX      New oligomers contg. modified bases - which form a triplex with G-C
XX      doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
XX      herpes malignancy and inflammation.
XX
XX      Claim 12; Page 70; 77pp; English.
PS
XX
XX      The synthetic oligomer is capable of forming a triplex at physiological
XX      pH with a purine rich target sequence by coupling into the major groove
XX      of the duplex. The specific target sequence of this oligomer is the human
XX      tumour necrosis factor beginning at nucleotide 1137 contg. a purine rich
XX      sequence concd. on one strand of the duplex. The oligomer, and others
XX      like it are useful in diagnosis and therapy of diseases characterised by
XX      specific DNA duplex targets, e.g. HPV, HER, HIV, hepatitis B, herpes,
XX      CC malignant tumours and inflammation. The triple helices form under mild
XX      conditions thus assays may be carried out without subjecting the test
XX      specimen to harsh conditions. See also AAQ25452-25501 and AAQ30226-448.
CC      (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
XX      Sequence 22 BP; 3 A; 8 C; 0 G; 11 T; 0 U; 0 Other;
SQ

```

```

DB      |||||
DB      22 AGAAGAGAGAGAGAAAT 3
DB
RESULT 160
ABK48140/C
ID      ABK48140 standard; DNA; 24 BP.
XX
XX      ABK48140;
AC
XX
XX      18-JUN-2002 (first entry)
DT
XX
XX      Aspergillus niger aminopeptidase RT-PCR primer poly-T.
DE
XX
XX      Aminopeptidase; primer; ss; food composition; dough; flavour enhancer;
XX      baked product; cheese; poly-T; reverse transcriptase PCR.
XX
XX      Synthetic.
OS
XX
XX      WO200216618-A1.
PN
XX
XX      28-FEB-2002.
PD
XX
XX      22-AUG-2001; 2001WO-EP009925.
PF
XX
XX      23-AUG-2000; 2000EP-00202995.
PR
XX
XX      (STAM ) DSM NV.
PA
XX
XX      Basten D, Dekker PJT, Schuurhuizen PW, Schaap PJ, Visser J;
XX
XX      MPI; 2002-257917/30.
DR
XX
XX      An isolated polypeptide with aminopeptidase activity, for preparing food
XX      compositions, such as bread and cheese, with enhanced flavoring.
XX
XX      Example 5; Page 40; 94pp; English.
PS
XX
XX      The invention relates to an isolated polypeptide with aminopeptidase
XX      activity and the gene encoding it (including sequences complementary to
XX      the gene and which hybridise to it at high stringency), from Aspergillus
XX      niger. Also included are a nucleic acid construct comprising the above
XX      polynucleotide operably linked to one or more control sequences that
XX      direct the production of the polypeptide in a suitable expression host, a
XX      recombinant expression vector comprising the above nucleic acid
XX      construct, a recombinant host cell comprising the above construct or
XX      vector, and producing the protein comprising cultivating an above strain/
XX      recombinant host cell to produce a supernatant and/or cells comprising
XX      the polypeptide and recovering the polypeptide. The aminopeptidase is
XX      used to prepare a food composition such as dough to enhance the flavour
XX      of a baked product from the dough and for preparing a cheese to enhance
XX      the flavour. The invention provides a bacterial enzyme for protein
XX      hydrolysis i.e. with aminopeptidase activity, to produce flavouring
XX      agents, and the enzyme has been isolated and characterised, compared to a
XX      previously observed weak aminopeptidase activity which was detected in an
XX      Aspergillus niger culture filtrate but the source was never isolated or
XX      identified. The use of enzymes to produce flavouring agents from
XX      proteinaceous material is better than use of strong acids which can
XX      severely degrade the amino acids obtained. The present sequence is a
XX      reverse transcriptase (RT)-PCR primer used to investigate the intron-exon
XX      structure of the aminopeptidase gene
XX
XX      Sequence 24 BP; 0 A; 0 C; 0 G; 23 T; 0 U; 1 Other;
SQ

```

```

Query Match      0.3%; Score 18.4; DB 1; Length 22;
Best Local Similarity 95.0%; Pred. No. 3.3e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY      1182 AGAAGAGAGAGAGAAAT 1201

```

RESULT 161
ADM92894
ID ADM92894 standard; DNA: 25 BP.
XX
XX ADM92894;
AC
XX
DT 03-JUN-2004 (first entry)
XX
DE SNP-containing cardiovascular associated gene primer #225.
XX
XX SNP, single nucleotide polymorphism; cardiovascular associated gene;
XX allelic variation; atherosclerosis; ischemia; reperfusion; hypertension;
XX stenosis; arterial inflammation; myocardial infarction; stroke; primer;
XX ss.
XX Homo sapiens.
XX OS
XX PN WO2003057911-A2.
XX
XX 17-JUL-2003.
XX
XX PD 07-JAN-2003; 2003WO-BP000060.
XX
XX PF 08-JAN-2002; 2002BP-00000153.
XX
XX PR (FARB) BAYER AG.
XX
XX PI Stropp U, Schwerts S, Kallabis H;
XX
XX WPI; 2003-577532/54.
XX
XX PT New isolated polynucleotides comprising single nucleotide polymorphisms
XX of the cardiovascular gene, useful for assessing predisposition or
XX PT susceptibility to a cardiovascular disease, e.g. atherosclerosis,
XX PT restenosis or stroke.
XX
XX PS Disclosure; Page 75; 187pp; English.
XX
XX CC The invention relates an isolated polynucleotide (I) encoded by a
XX CC cardiovascular associated (CA) gene, having allelic variation contained
XX CC in a functional surrounding like full length cDNA for CA gene
XX CC polypeptide, and with or without the CA gene promoter sequence. (I) is a
XX CC polynucleotide comprising single nucleotide polymorphisms predicting
XX CC cardiovascular disease. The polynucleotides are useful for assessing
XX CC predisposition or susceptibility to a cardiovascular disease, e.g.
XX CC atherosclerosis, ischemia/reperfusion, hypertension, restenosis, arterial
XX CC inflammation, myocardial infarction, and stroke. These may also be used
XX CC to predict personal medication schemes omitting adverse drug reactions,
XX CC or as probes for detecting genetic polymorphisms and as templates for the
XX CC recombinant production of normal or variant peptides/polypeptides encoded
XX CC by the genes. This sequence corresponds to a PCR primer to amplify one of
XX CC the genes of the invention.
XX
SQ Sequence 25 BP; 13 A; 0 C; 12 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 18.4; DB 1; Length 25;
Best Local Similarity 95.0%; Pred. No. 3.4e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 1181 GAGAAAGAGAGAGAGAAA 1200
DB 1 GAGAAAGAGAGAGAGAGACA 20
XX
RESULT 162
AAS20595/c
ID AAS20595 standard; DNA: 26 BP.
XX
XX AAS20595;
AC
XX
XX 23-APR-2002 (first entry)
DT
XX Human zslg63 cDNA sequencing primer ZC7231.
DE

XX
XX Human; zslg63; chromosome 4q12-4q13; salivary protein; antimicrobial; ss;
XX KM microbial infection; tooth decay; periodontal disease; thrush; emphysema;
XX KM gastrointestinal disease; urinary tract infection; vaginal infection;
XX KM skin infection; epithelial wound; chronic tissue damage; cystic fibrosis;
XX KM acquired immunodeficiency syndrome; AIDS; lung infection; sarcoidosis;
XX KM chronic bronchitis; gene therapy; protein therapy; primer; ZC7231.
XX
XX OS Homo sapiens.
XX
XX PN US6331413-B1.
XX
XX PD 18-DEC-2001.
XX
XX PF 17-MAR-2000; 2000US-00527345.
XX
XX PR 17-MAR-1999; 99US-0124820P.
XX
XX PA (ZYMO) ZYMOGENETICS INC.
XX
XX PI Adler DA, Sheppard PO;
XX
XX WPI; 2002-096707/13.
XX
XX PT Polynucleotides encoding salivary proteins useful as anti-microbial
XX PT agents.
XX
XX PS Example 1; Col 53; 29pp; English.
XX
XX CC The invention relates to a polynucleotide derived from the 4q12-4q13
XX CC region of human chromosome 4 and encoding a zslg63 polypeptide, a
XX CC secreted salivary protein with anti-microbial activity. Due to their
XX CC microbial activity, the sequences can be used in the study of microbial
XX CC infections, e.g. for recombinant production of anti-microbial proteins.
XX CC The sequences can be used in the treatment of tooth decay, periodontal
XX CC disease, thrush, gastrointestinal disease, urinary tract infections,
XX CC vaginal infections, skin infections, epithelial wounds, chronic tissue
XX CC damage, acquired immunodeficiency syndrome (AIDS), cystic fibrosis, lung
XX CC infections, sarcoidosis, emphysema and chronic bronchitis. This sequence
XX CC represents a sequencing primer for cDNA encoding human zslg63
XX
SQ Sequence 26 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 1 Other;
XX
Query Match 0.3%; Score 18.4; DB 1; Length 26;
Best Local Similarity 83.3%; Pred. No. 3.4e+02;
Matches 20; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
XX
QY 5392 TAAAAAATTCAAAAAAGAAAAA 5415
DB 26 BAAAAAAGAAAAAAGAAAAA 3
XX
RESULT 163
ABS52637/c
ID ABS52637 standard; DNA: 26 BP.
XX
XX ABS52637;
AC
XX
XX 15-NOV-2002 (first entry)
DT
XX Human secreted salivary protein zslg63 PCR primer ZC7231.
XX
XX Human; secreted salivary protein; zslg63; immunogen; zslg63-cytokine;
XX KM antibody-cytokine; in vivo killing; pathological microbe; bacteria;
XX KM fungal; viral; infection; salivary gland; anti-microbial; dental caries;
XX KM tooth decay; periodontal disease; thrush; gastrointestinal disease;
XX KM urinary tract infection; vaginal infection; skin infection; microflora;
XX KM epithelial wound; pathogenic colonisation; invasion; pro-inflammatory;
XX KM chronic tissue damage; vascular system; diabetes; anti-inflammatory;
XX KM incompetent immune system; AIDS; acquired immunodeficiency syndrome;
XX KM chemotherapy; radiation treatment; lung infection; cystic fibrosis;
XX KM digestion; PCR; primer; ss.
XX

```

OS Homo sapiens.
XX
XX US2002081701-A1.
XX
XX 27-JUN-2002.
XX
XX 03-AUG-2001; 2001US-00922480.
XX
XX 17-MAR-1999; 99US-0124820P.
XX
XX 17-MAR-2000; 2000US-00527345.
XX
XX (ADLER/) ADLER D A.
XX (SHEP/) SHEPPARD P O.
XX
XX Adler DA, Sheppard PO;
XX
XX WPI; 2002-635468/68.
XX
XX Novel secreted salivary protein, zsig63 and polynucleotide encoding it
XX useful for treating microbial infections, inflammatory conditions, dental
XX caries and lung infections associated with cystic fibrosis.
XX
XX Example 1; Page 29; 33pp; English.
XX
XX The present invention relates to a new secreted salivary protein, zsig63.
XX The invention is useful for detecting in a test sample, the presence of
XX an antagonist or agonist of zsig63 protein activity. The invention is
XX also useful as an immunogen for producing an antibody to zsig63
XX polypeptide. zsig63-cytokine fusion proteins or antibody-cytokine fusion
XX protein are useful for enhancing in vivo killing of target tissues.
XX Pharmaceutical composition comprising purified zsig63 polypeptide are
XX useful in the treatment of conditions associated with pathological
XX microbes, including bacterial, fungal and viral infections. High
XX expression of zsig63 in salivary gland suggests that anti-microbial
XX polypeptides are useful for treatment of dental caries (tooth decay),
XX periodontal disease, thrush and gastrointestinal disease. Other
XX applications can be used in urinary tract infections, vaginal infections,
XX prevention of infection in skin and other epithelial wounds. The
XX polypeptides can be used to establish normal microflora and protect
XX against pathogenic colonisation and invasion. The invention is useful
XX when pro-inflammatory activity is desired. Applications for such pro-
XX inflammatory activity include the treatment of chronic tissue damage,
XX particularly in areas having a limited or damaged vascular system e.g.,
XX damage in extremities associated with diabetes. Antagonists to zsig63
XX polypeptides may be useful as anti-inflammatory agents. The invention is
XX useful for the treatment of patients having incompetent immune system,
XX such as AIDS (acquired immunodeficiency syndrome) patients or individuals
XX that have undergone chemotherapy, radiation treatment. The invention is
XX also useful for the treatment of lung infections associated with cystic
XX fibrosis and its agonists or antagonists are useful for aiding digestion.
XX The present nucleic acid sequence represents a PCR primer that was used
XX in the methods of the invention for identification of zsig63
XX
XX Sequence 26 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 1 Other;
XX
XX Query Match 0.3%; Score 18.4; DB 1; Length 26;
XX Best Local Similarity 83.3%; Pred. No. 3.4e+02;
XX Matches 20; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
XX
XX 5392 TAAAAAATTCACAAAAAGAAAAA 5415
XX :||||| | | | | | | | | | | |
XX 26 BAAAAAAAAAAAAAAAAAAAAAAA 3
XX
XX RESULT 164
XX AAD45054/C
XX ID AAD45054 standard; DNA; 26 BP.
XX
XX AAD45054;
XX
XX 27-DEC-2002 (first entry)
XX
XX ZC7231 primer used in the identification of human zsig63 DNA.
XX

```

```

XX
XX Human; secreted salivary protein; zsig63 protein; host defense protein;
XX immune modulating factor; antipathogenic; cell-cell signalling molecule;
XX growth factor; cytokine; growth factor hormone activity; dental caries;
XX infection; tooth decay; periodontal disease; gastrointestinal disease;
XX thrush; urinary tract infection; vaginal infection; diabetes; obesity;
XX anti-inflammatory; chronic tissue damage; lung dysfunction; restenosis;
XX gene therapy; salivary gland dysfunction; prostate gland dysfunction;
XX forensic DNA profiling; chondrosarcoma; atherosclerosis; primer; ss.
XX
XX Homo sapiens.
XX
XX US2002090677-A1.
XX
XX 11-JUL-2002.
XX
XX 03-AUG-2001; 2001US-00922336.
XX
XX 17-MAR-1999; 99US-0124820P.
XX
XX 17-MAR-2000; 2000US-00527345.
XX
XX (ADLER/) ADLER D A.
XX (SHEP/) SHEPPARD P O.
XX
XX Adler DA, Sheppard PO;
XX
XX WPI; 2002-642378/69.
XX
XX Novel secreted salivary polypeptide, zsig63, useful as antimicrobial
XX agent for treating microbial infection, dental caries, periodontal
XX disease, thrush gastrointestinal disease, and for aiding digestion.
XX
XX Example 1; Page 29; 33pp; English.
XX
XX The invention relates to human secreted salivary polypeptide designated
XX as zsig63 and nucleic acid molecules encoding such polypeptides. zsig63
XX can be used in detecting agonists and antagonists or its activity, and is
XX also useful as a host defense polypeptide, immune modulating factor,
XX antipathogenic polypeptide, cell-cell signalling molecule, growth factor,
XX cytokine, or as secreted extracellular matrix associated proteins with
XX growth factor hormone activity. It is useful for treating conditions
XX associated with pathological microbes, including bacterial, fungal and
XX viral infections, for treating dental caries (tooth decay), periodontal
XX disease, thrush and gastrointestinal disease, for treating urinary tract
XX infection, vaginal infection and for preventing infection in skin and
XX other epithelial wounds. zsig63 is useful for establishing normal
XX microflora and protect against pathogenic colonisation and invasion, for
XX treating chronic tissue damage e.g. damage in extremities associated with
XX diabetes and useful as anti-inflammatory agents. It is useful as a marker
XX of lung dysfunction, salivary gland dysfunction, or dysfunction of
XX prostate gland. It is also therapeutically useful for aiding digestion.
XX Polynucleotides of the invention are used in gene therapy for increasing
XX or inhibiting zsig63 activity, for detecting abnormalities on human
XX chromosome 4 associated with disease or other human traits and as
XX diagnostics in forensic DNA profiling. Sequences of the invention are
XX useful for stimulating proliferation or differentiation of cardiac
XX myocytes, for proliferation or differentiation of adipocytes and for
XX inhibiting chondrosarcomas, atherosclerosis, restenosis and obesity. The
XX present sequence is a primer used in the identification of human zsig63
XX DNA
XX
XX Sequence 26 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 1 Other;
XX
XX Query Match 0.3%; Score 18.4; DB 1; Length 26;
XX Best Local Similarity 83.3%; Pred. No. 3.4e+02;
XX Matches 20; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
XX
XX 5392 TAAAAAATTCACAAAAAGAAAAA 5415
XX :||||| | | | | | | | | | | |
XX 26 BAAAAAAAAAAAAAAAAAAAAAAA 3
XX
XX RESULT 165
XX

```

ABX93598/c
ID ABX93598 standard; DNA; 26 BP.
XX
AC ABX93598;
XX
DT 28-MAY-2003 (first entry)
XX
DE Human zsig63 PCR/sequencing primer ZC7231.
XX
KW 86; PCR; zsig63; adhesin; salivary gland; dental carries;
KW periodontal disease; thrush; gastrointestinal disease; epithelial wound;
KW urinary tract infection; vaginal infection; skin infection; primer;
KW pro-inflammatory; chronic tissue damage; vascular system; diabetes; AIDS;
KW lung infection; cystic fibrosis; lung dysfunction; digestive;
KW salivary gland carcinoma; Pneumocystis carinii infection; emphysema;
KW chronic bronchitis; prostate dysfunction; prostate adenocarcinoma;
KW cell culture media; gene therapy; human chromosome 4q12-4q13;
KW dentinogenesis imperfecta; dentin dysplasia type II.
XX
XX Synthetic.
XX
XX US2002173027-A1.
XX
XX 21-NOV-2002.
XX
XX 03-AUG-2001; 2001US-00922469.
XX
XX 17-MAR-1999; 99US-0124820P.
XX 17-MAR-2000; 2000US-00527345.
XX
XX (ADLER/) ADLER D A.
XX (SHEP/) SHEPPARD P O.
XX
XX Adler DA, Sheppard PO;
XX
XX WPI; 2003-328428/31.
XX
XX Novel isolated zsig63 polypeptide, member of the adhesin family, useful
XX for treating dental carries, periodontal disease, thrush,
XX gastrointestinal disease, urinary tract infections, vaginal infections,
XX skin infections.
XX
XX
XX Example 1; Page 29; 32pp; English.
XX
XX The invention relates to an isolated zsig63 polypeptide comprising at
XX least 90% identity to an amino acid sequence which comprises domain 1 of
XX zsig63, domain 2, domain 3, mature zsig63 and full length zsig63. Also
XX included are the polynucleotide encoding zsig63, a zsig63 expression
XX vector, a cultured cell comprising the vector and expressing the protein,
XX a DNA encoding a fusion protein (comprising amino acids 1-15, 16-37, 38-
XX 126, 127-219 or 16-219 of zsig63 and an additional protein), using a
XX zsig63 reporter gene construct to identify zsig63 agonists, and producing
XX an anti-zsig63 antibody using zsig63 immunogenic peptides, zsig63 is
XX useful for detecting in a test sample, the presence of antagonist of
XX zsig63 protein activity. Zsig63 has antimicrobial activity and since
XX exhibits high expression in salivary gland, can be used for treating
XX dental carries, periodontal disease, thrush, and gastrointestinal
XX disease, urinary tract infections, vaginal infections, skin infections
XX and other epithelial wounds. The polypeptides can be used to establish
XX normal microflora and protect against pathogenic colonization and
XX invasion. Zsig63 can also be used for providing pro-inflammatory activity
XX for treating chronic, tissue damage particularly in areas having limited
XX or damaged vascular system, e.g. in diabetes, and for treating
XX immunocompromised AIDS patients or in individuals that have undergone
XX chemotherapy, radiation treatment, for treating lung infections e.g. in
XX cystic fibrosis. Detection of zsig63 polypeptide at relatively high
XX levels in the trachea may indicate that such polypeptides may serve as a
XX marker of lung dysfunction. Zsig63 is also useful in diagnosing
XX conditions associated with salivary gland or lung dysfunction including
XX salivary gland carcinoma, Pneumocystis carinii infection, emphysema,
XX chronic bronchitis, prostate dysfunctions such as prostate
XX adenocarcinoma, aiding digestion, and as components of defined cell
XX culture media and may be used to replace serum that is commonly used in

CC culture. The DNA is useful in gene therapy applications to increase or
CC inhibit zsig63 activity, and for detecting abnormalities on human
CC chromosome 4 (e.g. 4q12-4q13, associated with dentinogenesis imperfecta,
CC and dentin dysplasia type II). Zsig63 is an adhesin family member. The
CC present sequence is a primer used to isolate and sequence nucleic acids
CC encoding human zsig63
XX
SQ Sequence 26 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 1 Other;
XX
Query Match 0.3%; Score 18.4; DB 1; Length 26;
Best Local Similarity 83.3%; Pred. No. 3.4e+02;
Matches 20; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
XX
QY 5392 TAAAAAATTCAGAAAAAGAAAAA 5415
DB 26 BAAAAAAAAAAAAAAAAAAAAA 3
XX
RESULT 166
ID ACP36382/c
XX ACP36382 standard; DNA; 26 BP.
XX
AC ACP36382;
XX
DT 04-DEC-2003 (first entry)
XX
DE Nucleotide sequence of a second back primer.
XX
KW Nucleic acid manipulation; mRNA profiling; polymerase chain reaction;
KW electrophoresis; PCR; primer; ss.
XX
OS Synthetic.
XX
XX WC2003064691-A2.
XX
XX 07-AUG-2003.
XX
XX 28-JAN-2003; 2003MO-IB000843.
XX
XX 29-JAN-2002; 2002US-0352215P.
XX
XX (GLOB-) GLOBAL GENOMICS AB.
XX
XX Linmarsson S, Ernfors P, Bauren G, Metels A, Pihlak A;
XX Montelius A;
XX
XX WPI; 2003-618365/58.
XX
XX Producing a population of double-stranded product DNA molecules, useful
XX for mRNA profiling, comprises amplification by nested polymerase chain
XX reaction.
XX
XX
XX Claim 6; Page 85; 105pp; English.
XX
XX The invention relates to producing a population of double-stranded
XX product DNA molecules comprising amplification by a nested PCR method.
XX The method is useful in profiling mRNA transcribed in a system under
XX investigation. The oligonucleotides are used as size standards in
XX electrophoresis, and as internal controls allowing for calculation of
XX relative amounts of material present. The present sequence represents a
XX specific example of a PCR primer used in the method of the invention
XX
SQ Sequence 26 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 1 Other;
XX
Query Match 0.3%; Score 18.4; DB 1; Length 26;
Best Local Similarity 83.3%; Pred. No. 3.4e+02;
Matches 20; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
XX
QY 5392 TAAAAAATTCAGAAAAAGAAAAA 5415
DB 26 BAAAAAAAAAAAAAAAAAAAAA 3

QY 5392 TAAAAAATACAAAAAGAAAAA 5415
 Db 25 BAAAAAAAAAAAAAAAAAAAAA 2

RESULT 169
 AAC62450/c
 AAC62450 standard; DNA; 23 BP.

AC AAC62450;

DT 07-FEB-2001 (first entry)

DE Cleavage of nucleic acids from solid supports assay oligonucleotide #1.

XX Nucleic acid cleavage; solid support; DNA-RNA hybrid;
 XX affinity chromatography; sequencing; mutagenesis; DNA preparation;
 KM nucleic acid purification; ss.

OS Synthetic.

XX Key Location/Qualifiers
 XX m1sc_rna 23 /*tag= a

XX MO200058329-A1.

XX 05-OCT-2000.

XX 28-MAR-2000; 2000MO-GB001190.

XX 29-MAR-1999; 99GB-00007245.

XX (GOLD/) GOLDSBOROUGH A.

XX WPI; 2000-664908/64.

XX Detaching nucleic acid molecule comprising unconventional nucleotide
 PT incorporated at predetermined site from a solid support involves cleaving
 PT the nucleic acid molecule at the site of unconventional nucleotide.

XX Disclosure; Page 16; 47pp; English.

XX The present invention is concerned with the cleavage of nucleic acids
 CC from solid supports. This is carried out by adding a non-conventional
 CC nucleotide into the nucleic acid attached to the support, so that it is
 CC recognised and cleaved by a specific DNA glycosylase and the sequence is
 CC released. This is useful in many molecular biological procedures such as
 CC sequencing, in vitro amplifications, cDNA and template preparation, DNA-
 CC based assays, mutagenesis procedures, nucleic acid purification and
 CC affinity chromatography. The present sequence is an oligonucleotide used
 CC in assays to demonstrate the methods of the invention

XX Sequence 23 BP; 0 A; 0 C; 0 G; 22 T; 1 U; 0 Other;

QY Query Match 0.3%; Score 18.2; DB 1; Length 23;
 Best Local Similarity 87.0%; Pred. No. 3.6e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAATCAAAAAAGAAAAA 5415
 Db 23 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 170
 AAC62451/c
 AAC62451 standard; RNA; 23 BP.

AC AAC62451;

DT 07-FEB-2001 (first entry)

DE Cleavage of nucleic acids from solid supports assay oligonucleotide #2.

XX Nucleic acid cleavage; solid support; affinity chromatography;
 KM sequencing; mutagenesis; DNA preparation; nucleic acid purification; ss.

OS Synthetic.

XX MO200058329-A1.

XX 05-OCT-2000.

XX 28-MAR-2000; 2000MO-GB001190.

XX 29-MAR-1999; 99GB-00007245.

XX (GOLD/) GOLDSBOROUGH A.

XX WPI; 2000-664908/64.

XX Detaching nucleic acid molecule comprising unconventional nucleotide
 PT incorporated at predetermined site from a solid support involves cleaving
 PT the nucleic acid molecule at the site of unconventional nucleotide.

XX Example 1; Page 32; 47pp; English.

XX The present invention is concerned with the cleavage of nucleic acids
 CC from solid supports. This is carried out by adding a non-conventional
 CC nucleotide into the nucleic acid attached to the support, so that it is
 CC recognised and cleaved by a specific DNA glycosylase and the sequence is
 CC released. This is useful in many molecular biological procedures such as
 CC sequencing, in vitro amplifications, cDNA and template preparation, DNA-
 CC based assays, mutagenesis procedures, nucleic acid purification and
 CC affinity chromatography. The present sequence is an oligonucleotide used
 CC in assays to demonstrate the methods of the invention

XX Sequence 23 BP; 0 A; 0 C; 0 G; 0 T; 23 U; 0 Other;

QY Query Match 0.3%; Score 18.2; DB 1; Length 23;
 Best Local Similarity 87.0%; Pred. No. 3.6e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAATCAAAAAAGAAAAA 5415
 Db 23 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 171
 AAT99286
 AAT99286 standard; DNA; 24 BP.

AC AAT99286;

DT 15-APR-1998 (first entry)

DE POLYA, a competitor oligonucleotide for binding human PUR-alpha.

XX PUR element; human; c-myc; inhibitor; hyperproliferative disease; ss;
 KM cancer; probe; hybridisation.

OS Synthetic.

XX Homo sapiens.

XX US5672479-A.

XX 30-SEP-1997.

XX 07-JUN-1995; 95US-00486421.

XX 28-AUG-1992; 92US-00938189.

XX 02-FEB-1993; 93US-00014943.

XX 06-JUN-1995; 95US-00470911.

XX (MOUN) MOUNT SINAI SCHOOL MEDICINE.

```
PI Bergemann AD, Johnson EM;
XX
XX WPI; 1997-488859/45.
XX
XX Assays for PUR protein ligands or modulators - using immobilised PUR
PT protein or fragments, to treat hyper-proliferative diseases, e.g. cancer.
XX
XX Example; Col 33; 64pp; English.
XX
XX The oligonucleotides AAT9279-T99286 were used as competitor
CC oligonucleotides for the binding of PUR protein to DNA. The PUR sequence
CC can be used to identify chemical or biological compounds that bind to PUR
CC or binding fragments of PUR. Inhibitors of PUR activity may be used to
CC treat hyperproliferative diseases such as cancer
XX
SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match      0.3%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
Db 1 AAAAAAAAAAAAAAAAAAAAAA 23

RESULT 172
AAV31743
ID AAV31743 standard; DNA; 24 BP.
XX
XX AAV31743;
AC
XX
XX 24-SEP-1998 (first entry)
DT
XX
XX Nucleotide sequence of the oligonucleotide POLYA.
DE
XX
XX PUR-alpha gene; inhibition; viral infection; cancer; PUR element;
KM hyperproliferative disease; ss.
XX
XX Synthetic.
OS
XX
XX US5756684-A.
PN
XX
XX 26-MAY-1998.
PD
XX
XX 06-JUN-1995; 95US-00470911.
PF
XX
XX 28-AUG-1992; 92US-00938189.
PR
PR 02-FEB-1993; 93US-00014943.
XX
XX (MOUN ) MOUNT SINAI SCHOOL MEDICINE.
PA
XX
XX Bergemann AD, Johnson EM;
PI
XX
XX WPI; 1998-321632/28.
DR
XX
XX PUR protein and its fragments - that inhibit PUR protein binding to PUR
PT element or other proteins.
XX
XX Example 7.1.1; Col 33; 63pp; English.
XX
XX This is the nucleotide sequence of an oligonucleotide used as a
CC competitor with the PUR element in the method of the invention, involving
CC the use of the PUR protein and its fragments, which inhibit PUR protein
CC binding to PUR element or other proteins. Inhibitors of PUR activity may
CC be useful for treating viral infections and hyperproliferative diseases
CC such as cancer
XX
SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match      0.3%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
OY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
Db 1 AAAAAAAAAAAAAAAAAAAAAA 23

RESULT 173
AAV31743
ID AAV31743 standard; DNA; 24 BP.
XX
XX AAV31743;
AC
XX
XX 12-APR-1999 (first entry)
DT
XX
XX Oligonucleotide POLYA used in PUR cloning and sequencing.
DE
XX
XX PUR element; PUR-alpha; hyperproliferative disease; cancer; human;
KM monoclonal antibody; identification; characterisation; ss.
XX
XX Synthetic.
OS
XX
XX Homo sapiens.
OS
XX
XX US5869622-A.
PN
XX
XX 09-FEB-1999.
PD
XX
XX 07-JUN-1995; 95US-00486809.
PF
XX
XX 28-AUG-1992; 92US-00938189.
PR
PR 02-FEB-1993; 93US-00014943.
XX
XX 06-JUN-1995; 95US-00470911.
XX
XX (MOUN ) MOUNT SINAI SCHOOL MEDICINE.
PA
XX
XX Bergemann AD, Johnson EM;
PI
XX
XX WPI; 1999-152881/13.
DR
XX
XX Monoclonal antibody specific for PUR protein - useful for treating
PT cancer.
XX
XX Example; Col 33; 64pp; English.
XX
XX The present invention describes a monoclonal antibody that specifically
CC binds to an epitope of the PUR protein. Antibodies that bind to the PUR
CC protein and neutralise PUR activity may be used to treat
CC hyperproliferative diseases such as cancer. PUR antibodies may be used
CC diagnostically to detect aberrant expression of the PUR protein and/or
CC mutations in the PUR gene. The present sequence represents an
CC oligonucleotide used in the cloning and sequencing of the PUR protein and
CC its sequence element PUR repeat, in an example from the present invention
XX
SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match      0.3%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
Db 1 AAAAAAAAAAAAAAAAAAAAAA 23

RESULT 174
AAV31743
ID AAV31743 standard; RNA; 24 BP.
XX
XX AAV31743;
AC
XX
XX 10-NOV-2000 (first entry)
DT
XX
XX pBluescriptSK+ phagemid primer SEQ ID NO: 9.
DE
XX
```

KM Primer; cloning; ligation; ss.
XX Synthetic.
XX WO200036088-A1.
XX 22-JUN-2000.
XX 17-DEC-1999; 99WO-US030277.
XX 17-DEC-1998; 98US-00213834.
XX (ROMA/) ROMANTCHIKOV Y.
XX Romantchikov Y;
XX WPI; 2000-442381/38.
XX
XX Inserting a nucleic acid into a circular vector comprising joining their
PT ends, melting, and reannealing ends at two different concentrations,
PT useful for cloning small amounts of nucleic acids and forming genomic
PT libraries.
XX
XX Example 3; Page 67; 71pp; English.
XX
XX This invention describes a novel method (M1) for inserting a nucleic acid
CC (N1) into a circular vector (V1) comprising joining ends of N1 and V1
CC under a first nucleic acid concentration, melting hybridized cohesive
CC circularization ends, and reannealing the ends at a second concentration.
CC The methods are useful for the cloning small amounts of nucleic acids and
CC forming genomic libraries of complex populations of DNA or cDNA. The
CC methods allow the cloning of minute amounts of nucleic acids efficiently
CC and avoids the size selection problems of prior art systems. Larger
CC nucleic acid fragments are just as easily cloned, allowing highly
CC representative libraries to be made. Vector to vector ligation is avoided
CC using the methods. AAA40351-A40366 represents primers used to illustrate
CC the method of the invention
CC
XX Sequence 24 BP; 0 A; 0 C; 0 G; 16 T; 8 U; 0 Other;
SQ
Query Match 0.3%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
DB 24 AAAAAAAAAAAAAAAAAAAAAA 2
RESULT 175
AAA40353/c
ID AAA40353 standard; DNA; 24 BP.
XX
XX AAA40353;
XX
XX 10-NOV-2000 (first entry)
XX
XX bluescriptSK+ phagemid primer SEQ ID NO: 3.
XX
XX Primer; cloning; ligation; ss.
XX
XX Synthetic.
XX
XX WO200036088-A1.
XX
XX 22-JUN-2000.
XX
XX 17-DEC-1999; 99WO-US030277.
XX
XX 17-DEC-1998; 98US-00213834.
XX
XX (ROMA/) ROMANTCHIKOV Y.
XX

PI Romantchikov Y;
XX WPI; 2000-442381/38.
XX
XX Inserting a nucleic acid into a circular vector comprising joining their
PT ends, melting, and reannealing ends at two different concentrations,
PT useful for cloning small amounts of nucleic acids and forming genomic
PT libraries.
XX
XX Example 1; Page 66; 71pp; English.
XX
XX This invention describes a novel method (M1) for inserting a nucleic acid
CC (N1) into a circular vector (V1) comprising joining ends of N1 and V1
CC under a first nucleic acid concentration, melting hybridized cohesive
CC circularization ends, and reannealing the ends at a second concentration.
CC The methods are useful for the cloning small amounts of nucleic acids and
CC forming genomic libraries of complex populations of DNA or cDNA. The
CC methods allow the cloning of minute amounts of nucleic acids efficiently
CC and avoids the size selection problems of prior art systems. Larger
CC nucleic acid fragments are just as easily cloned, allowing highly
CC representative libraries to be made. Vector to vector ligation is avoided
CC using the methods. AAA40351-A40366 represents primers used to illustrate
CC the method of the invention
CC
XX Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
DB 24 AAAAAAAAAAAAAAAAAAAAAA 2
RESULT 176
AAF9756/c
ID AAF9756 standard; DNA; 24 BP.
XX
XX AAF9756;
XX
XX 12-JUN-2001 (first entry)
XX
XX Immunostimulatory nucleic acid #872.
XX
XX Vaccine; cytostatic; virucidal; bactericidal; anti-parasitic;
KM immunostimulatory; tumour; viral infection; bacterial infection;
KM fungal infection; parasitic infection; cancer; asthma;
XX infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX
XX Synthetic.
XX
XX WO200122972-A2.
XX
XX 05-APR-2001.
XX
XX 25-SEP-2000; 2000WO-US026383.
XX
XX 25-SEP-1999; 99US-0156113P.
XX
XX 27-SEP-1999; 99US-0156135P.
XX
XX 23-AUG-2000; 2000US-0227436P.
XX
XX (ROMA) UNIT IOWA RES FOUND.
XX
XX (COLE-) COLBY PHARM GMBH.
XX
XX Krieg AM, Schetter C, Vollmer J;
XX
XX WPI; 2001-273485/28.
XX
XX Vaccinating against tumors, infectious diseases, allergies and asthma
PT using immunostimulatory Py-rich and TG nucleic acids.
XX
XX Claim 101; Page 57; 338pp; English.
PS

```
XX The present invention relates to a method for stimulating an immune
CC response. The method comprises administering an immunostimulatory nucleic
CC acid to a non-rodent subject in sufficient quantity to stimulate an
CC immune response. The present sequence is one such immunostimulatory
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
CC also useful for preventing cancer, asthma, infectious disease, allergy or
CC immune deficiency. The present sequence can also be used to redirect a
CC Th2 to a Th1 immune response and to activate immune cells. Note: the
CC present sequence may have a phosphorothioate backbone
XX
SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
Query Match 0.3%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAATACAAAAAGAAAAA 5415
Db 24 AAAAAAAAAAAAAAAAAAAAAA 2
RESULT 177
AAF99304/C
ID AAF99304 standard; DNA; 24 BP.
XX
AC AAF99304;
XX
DT 12-JUN-2001 (first entry)
XX
DE Immunostimulatory nucleic acid #420.
XX
KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KW immunostimulatory; tumour; viral infection; bacterial infection;
KW fungal infection; parasitic infection; cancer; asthma;
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX
OS Synthetic.
XX
PN WO200122972-A2.
XX
PD 05-APR-2001.
XX
PF 25-SEP-2000; 2000MO-US026383.
XX
PR 25-SEP-1999; 99US-0156113P.
PR 27-SEP-1999; 99US-0156135P.
PR 23-AUG-2000; 2000US-0227436P.
XX
PA (IOWA ) UNIV IOWA RES FOUND.
PA (COLE-) COLEY PHARM GMBH.
XX
PI Krieg AM, Schetter C, Vollmer J;
XX
WPI; 2001-273485/28.
XX
Vaccinating against tumors, infectious diseases, allergies and asthma
using immunostimulatory Py-rich and TG nucleic acids.
XX
Claim 101; Page 46; 338pp; English.
XX
The present invention relates to a method for stimulating an immune
CC response. The method comprises administering an immunostimulatory nucleic
CC acid to a non-rodent subject in sufficient quantity to stimulate an
CC immune response. The present sequence is one such immunostimulatory
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
CC also useful for preventing cancer, asthma, infectious disease, allergy or
CC immune deficiency. The present sequence can also be used to redirect a
CC Th2 to a Th1 immune response and to activate immune cells. Note: the
CC present sequence may have a phosphorothioate backbone
```

```
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
CC also useful for preventing cancer, asthma, infectious disease, allergy or
CC immune deficiency. The present sequence can also be used to redirect a
CC Th2 to a Th1 immune response and to activate immune cells. Note: the
CC present sequence may have a phosphorothioate backbone
XX
SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
Query Match 0.3%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAATACAAAAAGAAAAA 5415
Db 24 AAAAAAAAAAAAAAAAAAAAAA 2
RESULT 178
AAF99757
ID AAF99757 standard; DNA; 24 BP.
XX
AC AAF99757;
XX
DT 12-JUN-2001 (first entry)
XX
DE Immunostimulatory nucleic acid #873.
XX
KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KW immunostimulatory; tumour; viral infection; bacterial infection;
KW fungal infection; parasitic infection; cancer; asthma;
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX
OS Synthetic.
XX
PN WO200122972-A2.
XX
PD 05-APR-2001.
XX
PF 25-SEP-2000; 2000MO-US026383.
XX
PR 25-SEP-1999; 99US-0156113P.
PR 27-SEP-1999; 99US-0156135P.
PR 23-AUG-2000; 2000US-0227436P.
XX
PA (IOWA ) UNIV IOWA RES FOUND.
PA (COLE-) COLEY PHARM GMBH.
XX
PI Krieg AM, Schetter C, Vollmer J;
XX
WPI; 2001-273485/28.
XX
Vaccinating against tumors, infectious diseases, allergies and asthma
using immunostimulatory Py-rich and TG nucleic acids.
XX
Claim 101; Page 57; 338pp; English.
XX
The present invention relates to a method for stimulating an immune
CC response. The method comprises administering an immunostimulatory nucleic
CC acid to a non-rodent subject in sufficient quantity to stimulate an
CC immune response. The present sequence is one such immunostimulatory
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
CC also useful for preventing cancer, asthma, infectious disease, allergy or
CC immune deficiency. The present sequence can also be used to redirect a
CC Th2 to a Th1 immune response and to activate immune cells. Note: the
CC present sequence may have a phosphorothioate backbone
```

SQL Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.3%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAACAAAAA 5415
1 AAAAAAAAAAAAAAAAAA 23

RESULT 179
ABV14842/c
ID ABV14842 standard; cDNA; 24 BP.

AC ABV14842;
XX
XX 13-SEP-2002 (first entry)

DE Human prostate expression marker cDNA 14833.

XX Human; prostate cancer; cytostatic; carcinogen; pharmacodynamic marker;
KW pharmacogenomic marker; gene; ss.

OS Homo sapiens.

XX MO200160860-A2.

XX 23-AUG-2001.

XX 20-FEB-2001; 2001WO-US005171.

XX 17-FEB-2000; 2000US-0183319P.

XX 16-MAR-2000; 2000US-0189662P.

XX 25-MAY-2000; 2000US-0207454P.

XX 09-JUN-2000; 2000US-0211314P.

XX 18-JUL-2000; 2000US-0219007P.

XX 13-DEC-2000; 2000US-0255281P.

XX (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.

XX Schlegel R, Endege WO, Monahan JR;

XX WPI; 2001-662795/76.

XX Novel isolated nucleic acid molecule associated with cancerous state of

XX prostate cells and correlating with presence of prostate cancer, useful

XX for detecting presence of prostate cancer, stage of prostate cancer.

XX Claim 1; Page 2483; 11750pp; English.

XX The invention relates to an isolated nucleic acid molecule (I) comprising

XX a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the

XX specification or its complement. (I) is useful for: (a) assessing whether

XX a patient is afflicted with prostate cancer; (b) monitoring the

XX progression of prostate cancer in a patient; (c) assessing the efficacy

XX of a test compound to inhibit prostate cancer in a patient; (d) assessing

XX the efficacy of a therapy for inhibiting prostate cancer in a patient;

XX (e) selecting a composition for inhibiting prostate cancer in a patient;

XX (f) assessing the prostate cell carcinogenic potential of a compound; (g)

XX determining whether prostate cancer has metastasized in a patient; (h)

XX assessing the aggressiveness or indolence of prostate cancer in a patient

XX ; (I) is also useful as a pharmacodynamic or pharmacogenomic marker

SQL Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.3%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAACAAAAA 5415
24 AAAAAAAAAAAAAAAAAA 2

RESULT-180

ABST78477/c
ID ABST78477 standard; DNA; 24 BP.

AC ABST78477;
XX
XX 13-DEC-2002 (first entry)

DE Angiogenesis inhibitory oligonucleotide #961.

XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;

XX tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;

XX diabetic retinopathy; retinopathy of prematurity; macular degeneration;

XX corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;

XX rubecosis; Osler-Webber Syndrome; myocardial angiogenesis;

XX plaque neovascularisation; telangiectasia; haemophilic joint;

XX angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;

XX scleroderma; hypertrophic scar.

XX Synthetic.

XX MO200253141-A2.

XX 11-JUL-2002.

XX 14-DEC-2001; 2001WO-US048458.

XX 14-DEC-2000; 2000US-0255534P.

XX (COLE-) COLEY PHARM GROUP INC.

XX Bratzler RL;

XX WPI; 2002-566690/50.

XX Inhibiting angiogenesis in a subject, involves administering at least one

XX antiangiogenic nucleic acid molecule to the subject.

XX Claim 2; Page 36; 276pp; English.

XX The invention relates to inhibiting angiogenesis in a subject, comprising

XX administering at least one antiangiogenic nucleic acid molecule. Also

XX included is a kit comprising a first container housing the antiangiogenic

XX nucleic acids, and instructions for administering them to a subject

XX having a condition characterised by unwanted angiogenesis. The method is

XX useful for inhibiting angiogenesis associated with solid tumour growth,

XX tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,

XX diabetic retinopathy, retinopathy of prematurity, macular degeneration,

XX corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,

XX rubecosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque

XX neovascularisation, telangiectasia, haemophilic joints, angiofibroma,

XX wound granulation, intestinal adhesions, atherosclerosis, scleroderma and

XX hypertrophic scars. The present sequence is an antiangiogenic nucleic

XX acid of the invention

SQL Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.3%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAACAAAAA 5415
24 AAAAAAAAAAAAAAAAAA 2

RESULT 181
ABST7949/c
ID ABST7949 standard; DNA; 24 BP.
XX ABST7949;

```
XX 13-DEC-2002 (first entry)
DE Angiogenesis inhibitory oligonucleotide #433.
DE
XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
XX tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
XX diabetic retinopathy; retinopathy of prematurity; macular degeneration;
XX corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
XX rubosis; Osler-Webber Syndrome; myocardial angiogenesis;
XX plaque neovascularisation; telangiectasia; haemophilic joint;
XX angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
XX scleroderma; hypertrophic scar.
OS Synthetic.
XX WO200253141-A2.
XX 11-JUL-2002.
XX 14-DEC-2001; 2001WO-US048458.
XX 14-DEC-2000; 2000US-0255534P.
XX 14-DEC-2000; 2000US-0255534P.
XX (COLE-) COLEY PHARM GROUP INC.
XX Bratzler RL;
XX WPI; 2002-566690/60.
XX Inhibiting angiogenesis in a subject, involves administering at least one
XX antiangiogenic nucleic acid molecule to the subject.
XX Claim 2; Page 27; 276pp; English.
XX The invention relates to inhibiting angiogenesis in a subject, comprising
XX administering at least one antiangiogenic nucleic acid molecule. Also
XX included is a kit comprising a first container housing the antiangiogenic
XX nucleic acids, and instructions for administering them to a subject
XX having a condition characterised by unwanted angiogenesis. The method is
XX useful for inhibiting angiogenesis associated with solid tumour growth,
XX tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
XX diabetic retinopathy, retinopathy of prematurity, macular degeneration,
XX corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
XX rubosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
XX neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
XX wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
XX hypertrophic scars. The present sequence is an antiangiogenic nucleic
XX acid of the invention
XX
XX Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.3%; Score 18.2; DB 1; Length 24;
XX Best Local Similarity 87.0%; Pred. No. 3.6e+02;
XX Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
DB 24 AAAAAAAAAAAAAAAAAAAAAA 2
RESULT 182
ABST78478
ID ABST78478 standard; DNA; 24 BP.
XX
XX AC ABST78478;
XX
XX 13-DEC-2002 (first entry)
XX Angiogenesis inhibitory oligonucleotide #962.
XX
XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
XX tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
```

```
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW rubosis; Osler-Webber Syndrome; myocardial angiogenesis;
KW plaque neovascularisation; telangiectasia; haemophilic joint;
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
KW scleroderma; hypertrophic scar.
OS Synthetic.
XX WO200253141-A2.
XX 11-JUL-2002.
XX 14-DEC-2001; 2001WO-US048458.
XX 14-DEC-2000; 2000US-0255534P.
XX 14-DEC-2000; 2000US-0255534P.
XX (COLE-) COLEY PHARM GROUP INC.
XX Bratzler RL;
XX WPI; 2002-566690/60.
XX Inhibiting angiogenesis in a subject, involves administering at least one
XX antiangiogenic nucleic acid molecule to the subject.
XX Claim 2; Page 36; 276pp; English.
XX The invention relates to inhibiting angiogenesis in a subject, comprising
XX administering at least one antiangiogenic nucleic acid molecule. Also
XX included is a kit comprising a first container housing the antiangiogenic
XX nucleic acids, and instructions for administering them to a subject
XX having a condition characterised by unwanted angiogenesis. The method is
XX useful for inhibiting angiogenesis associated with solid tumour growth,
XX tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
XX diabetic retinopathy, retinopathy of prematurity, macular degeneration,
XX corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
XX rubosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
XX neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
XX wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
XX hypertrophic scars. The present sequence is an antiangiogenic nucleic
XX acid of the invention
XX
XX Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.3%; Score 18.2; DB 1; Length 24;
XX Best Local Similarity 87.0%; Pred. No. 3.6e+02;
XX Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
DB 1 AAAAAAAAAAAAAAAAAAAAAA 23
RESULT 183
ABL39405/C
ID ABL39405 standard; DNA; 24 BP.
XX
XX AC ABL39405;
XX
XX 16-APR-2002 (first entry)
XX Immunostimulatory nucleic acid SEQ ID NO: 841.
XX
XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
XX angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..24
XX FT /tag= a
XX FT /mod_base= OTHER
```

/note= "phosphorothioate backbone"

XX XX WO200197843-A2.
 XX XX
 XX XX 27-DEC-2001.
 XX XX
 XX XX 22-JUN-2001; 2001WO-US020154.
 XX XX
 XX XX 22-JUN-2000; 2000US-0213346P.
 XX XX
 XX XX (IOWA) UNIV IOWA RES FOUND.
 XX XX
 XX XX Weiner G, Hartmann G;
 XX XX
 XX XX WPI; 2002-154611/20.
 XX XX
 XX XX Treating or preventing cancer, such as basal cell carcinoma, comprises
 XX XX PT administering immunostimulatory nucleic acids that induce expression of
 XX XX PT cell surface antigens and antibodies to a subject having or at risk of
 XX XX PT developing cancer.
 XX XX
 XX XX PS Disclosure; Page 309; 312pp; English.
 XX XX
 XX XX The present invention relates to methods for treating or preventing
 XX XX CC cancer, involving administering to a subject having or at risk of
 XX XX CC developing cancer immunostimulatory nucleic acids that induce expression
 XX XX CC of cell surface antigens and antibodies. The methods are useful for
 XX XX CC treating or preventing cancer such as basal cell carcinoma, bladder
 XX XX CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
 XX XX CC breast cancer, cervical cancer, colon and rectum cancer, connective
 XX XX CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
 XX XX CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
 XX XX CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
 XX XX CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
 XX XX CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
 XX XX CC present sequence is an immunostimulatory oligonucleotide described in the
 XX XX CC exemplification of the invention

Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.3%; Score 18.2; DB 1; Length 24;
 Best Local Similarity 87.0%; Pred. No. 3.6e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAACAAAAAAGAAAAA 5415
 DB 24 AAAAAAAAAAAAAAAAAAAAAA 2

RESULT 184
 ABX14631/C
 ID ABX14631 standard; DNA; 24 BP.
 XX XX
 XX XX ABX14631;
 XX XX
 XX XX 04-MAR-2003 (first entry)
 XX XX
 XX XX Guanosine triphosphatase activator protein 10.12 RT-PCR primer #1.
 XX XX
 XX XX ss; guanosine triphosphatase activator protein 10.12; PCR; primer;
 XX XX KM malignant tumour; inflammation; immunological disease; haemopathy;
 XX XX KM human immunodeficiency virus infection; HIV; RT-PCR;
 XX XX KM reverse transcriptase PCR.
 XX XX
 XX XX OS unidentified.
 XX XX
 XX XX CN1352022-A.
 XX XX
 XX XX 05-JUN-2002.
 XX XX
 XX XX 10-NOV-2000; 2000CN-00127330.
 XX XX
 XX XX 10-NOV-2000; 2000CN-00127330.

XX XX
 XX XX (BODE-) BODE GENE DEV CO LTD SHANGHAI.
 XX XX
 XX XX Mao Y, Xie Y;
 XX XX
 XX XX WPI; 2002-714410/78.
 XX XX
 XX XX New polypeptide-guanosine triphosphatase activator protein 10.12 and
 XX XX PT polynucleotide for encoding such polypeptide.
 XX XX
 XX XX PS Example 2; Page 17 (disclosure); 33pp; Chinese.
 XX XX
 XX XX The present invention discloses a new kind of polypeptide, guanosine
 XX XX CC triphosphatase activator protein 10.12, polynucleotides encoding this
 XX XX CC polypeptide and DNA recombination process to produce the polypeptide. The
 XX XX CC present invention also discloses applying the polypeptide in treating
 XX XX CC various diseases, such as malignant tumours, inflammations, immunological
 XX XX CC diseases, haemopathy and human immunodeficiency virus (HIV) infection.
 XX XX CC The present invention also discloses the antagonist resisting the
 XX XX CC polypeptide and its treatment effect. The present invention also
 XX XX CC discloses the application of the polynucleotides for encoding guanosine
 XX XX CC triphosphatase activator protein 10.12. The present sequence is a reverse
 XX XX CC transcriptase (RT)-PCR primer used to isolate nucleic acids encoding
 XX XX CC guanosine triphosphatase activator protein 10.12

Sequence 24 BP; 5 A; 5 C; 10 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 18.2; DB 1; Length 24;
 Best Local Similarity 87.0%; Pred. No. 3.6e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3594 TGCTCAGGCTAATCTCAAACTCC 3616
 DB 24 TGCCCGAGCTGCTCAAACTCC 2

RESULT 185
 ABA98840
 ID ABA98840 standard; DNA; 24 BP.
 XX XX
 XX XX ABA98840;
 XX XX
 XX XX 01-JUL-2002 (first entry)
 XX XX
 XX XX A24 oligonucleotide for the creation of Pc-A24.
 XX XX
 XX XX Component detection; clinical diagnosis; cell detection; drug detection;
 XX XX KM metabolite detection; pesticide detection; ligand detection; ss.
 XX XX
 XX XX OS Synthetic.
 XX XX
 XX XX Key Location/Qualifiers
 XX XX FH modified_base 24
 XX XX FT /*tag= a
 XX XX FT /label= OTHER
 XX XX FT /note= "modified by PO20CH2CH2CH2SSGCH2CH2CH2OH"
 XX XX
 XX XX WO200184157-A2.
 XX XX
 XX XX 08-NOV-2001.
 XX XX
 XX XX 03-MAY-2001; 2001WO-US014528.
 XX XX
 XX XX 04-MAY-2000; 2000US-00564230.
 XX XX
 XX XX (DADR-) DADR BEHRING INC.
 XX XX
 XX XX Pease JS, Cromer R, Patel R, Kurn N, De Keczzer S;
 XX XX
 XX XX WPI; 2002-164078/21.
 XX XX
 XX XX Detection of multiple analytes, e.g. ligands, receptors, polynucleotides
 XX XX PT and pollutants, involves adding a combination of sensitizer reagents and

PT reactive reagent Actuable by a product of the sensitizer reagents.
XX
PS Example; Page 58; 87pp; English.
XX
CC The invention relates to the detection of multiple components in a
CC medium, comprising combining the medium with at least two sensitizer
CC reagents, and at least one reactive reagent activated by a product
CC generated by the sensitizer reagents when activated; and differentially
CC activating the sensitizer reagents. The combination of sensitizer
CC reagents and reactive reagent(s) allows differential detection of the
CC components. Methods of the invention may be used for the detection of
CC ligands, receptors and polynucleotides, and also for the detection of
CC e.g. cells, various drugs, metabolites, pesticides (e.g. polynucleotides
CC biphenyls, phosphate esters, thiophosphates, cardamoms and
CC polynucleotides, sulfonamides) and pollutants. Methods of the invention
CC allow the detection of multiple analytes in a single test medium. An
CC application of the methods of the present invention would be in the field
CC of clinical diagnostics. The current sequence represents A24
CC oligonucleotide for the creation of oligonucleotide coated phthalocyanine
CC sensitizer particles (PC-A24)
XX
SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.3%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
DB 1 AAAAAAAAAAAAAAAAAAAAAA 23
RESULT 186
AAS17869
ID AAS17869 standard; DNA; 24 BP.
XX
AC AAS17869;
XX
DT 08-MAY-2002 (first entry)
XX
DE A24 oligonucleotide used to create dopTAR chemiluminescer particles.
XX
KW Polymorphism detection; sequence detection; mutation detection; A24;
KW probe; non-dissociative ternolecular complex; dopTAR sensitizer particle;
KW single nucleotide polymorphism; SNP; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 24 /tag= a
FT /note= "A is covalently linked to a
FT PO2OCH2CH2SCH2SCH2SCH2CH2OH moiety"
XX
PN WO200190399-A2.
XX
PD 29-NOV-2001.
XX
PF 17-MAY-2001; 2001WO-US016089.
XX
PR 19-MAY-2000; 2000US-00574596.
XX
PA (DADE-) DADE BEHRING INC.
XX
PI Patel RD;
XX
DR WPI, 2002-097664/13.
XX
PT Detecting presence of polynucleotide, differences between polynucleotide
PT sequences, useful for detecting single nucleotide polymorphism and
PT alleles of polynucleotide sequence involves use of three competitive
PT probes.

PS Example; Page 47; 75pp; English.
XX
CC This invention represents a method for detecting the presence of a
CC polynucleotide sequence, differences in polynucleotide sequences or
CC mutations in genomic DNA. The method involves contacting 3
CC oligonucleotide probes with a sample containing a polynucleotide. The
CC first probe hybridizes to a region of the polynucleotide sequence and the
CC second and third probes can bind a second region of the polynucleotide
CC sequence. The second and third probes are identical except for the
CC presence or difference of one or more nucleotides. The reaction medium is
CC then subjected to conditions for forming substantially non-dissociative
CC ternolecular complexes, which can be at least one of, the polynucleotide
CC sequence with the first and second probes or the polynucleotide sequence
CC with the first and third probes. The oligonucleotide probes have labels
CC non-covalently bound to allow for their detection upon binding. The
CC method of the invention is useful for detecting the presence of a single
CC nucleotide polymorphism (SNP) in a fragment of genomic DNA. The method
CC can be used for the direct detection of nucleic acid in very small
CC quantities without amplification. In addition, the method may be carried
CC out with amplification of the target and reference sequences. This
CC sequence represents an oligonucleotide probe A24 used to create dopTAR
CC chemiluminescer sensitizer particles in the method of the invention.
CC Binding the nucleic acid to a suspendable particle acts as a support and
CC provides a means of segregating the bound polynucleotide target from the
CC bulk solution
XX
SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.3%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
DB 1 AAAAAAAAAAAAAAAAAAAAAA 23
RESULT 187
ABK15639/C
ID ABK15639 standard; DNA; 24 BP.
XX
AC ABK15639;
XX
DT 08-MAY-2002 (first entry)
XX
DE RNA-PCR procedure primer poly(dT)24.
XX
KW RNA-PCR; primer; ss; poly(dT)24; cytosstatic; antibacterial; gene therapy;
KW mRNA-cDNA hybrid; gene function inhibition; cancer; PGSG; antisense;
KW high throughput screening; D-RNAI; DNA-RNA interference; Rdrp;
KW RNA dependent RNA polymerase; posttranscriptional gene silencing.
XX
OS Synthetic.
XX
PN WO200210374-A2.
XX
PD 07-FEB-2002.
XX
PF 02-AUG-2001; 2001WO-US024412.
XX
PR 02-AUG-2000; 2000US-0222479P.
XX
PA (UYSC-) UNIV SOUTHERN CALIFORNIA.
XX
PI Lin S, Chuong C, Widelitz RB;
XX
DR WPI, 2002-188740/24.
XX
PT Generating mRNA-cDNA hybrids for suppressing cancer-related genes, or
PT treating or preventing microbe related genes, comprises thermocycling
PT steps of promoter-linked double-stranded cDNA or RNA synthesis.
PS Example 5; Page 26; 53pp; English.

XX The invention relates to generating mRNA-cDNA hybrids, comprising (a)
 CC providing a solution containing a nucleic acid template, one or more
 CC primers complementary to the sense conformation of the nucleic acid
 CC template, and one or more promoter-linked primers complementary to the
 CC antisense conformation of the nucleic acid template, and with an RNA
 CC promoter, (b) treating the nucleic acid template with the one of more
 CC primers to synthesise a first cDNA strand, (c) treating the first cDNA
 CC strand with one or more promoter-linked primers to synthesise a promoter-
 CC linked double-stranded nucleic acid, (d) treating the promoter-linked
 CC double-stranded nucleic acid to synthesise amplified mRNA fragments and
 CC (e) treating the mRNA fragments with one or more primers to synthesise
 CC mRNA-cDNA hybrids by reverse transcription of the amplified mRNA
 CC fragments. The method is useful for preparing high amounts of pure and
 CC specific mRNA-cDNA hybrids for transducing biological effects of pure and
 CC in vitro as well as in vivo, for inhibiting gene function in prokaryotes
 CC and eukaryotes in vivo and in vitro, for suppressing cancer-related
 CC genes, in treating or preventing microbe related genes, in studying
 CC candidate molecular pathways with systematic knock out of involved
 CC molecules, in high throughput screening of gene functions based on
 CC microarray analysis, and as a tool in studying gene function in
 CC physiological conditions. The mRNA-cDNA hybrids may be used to screen for
 CC special gene functions, for manipulating gene expression in vitro, and
 CC for designing therapy for genetic diseases in vivo. The cDNA part of a D-
 CC RNAI (DNA-RNA interference) can be modified by nucleotide analogue
 CC incorporation to increase the stability and effectiveness of transfected
 CC probe activities. The Rddp (RNA dependent RNA polymerase) enzyme may
 CC provide higher affinity of the mRNA template of a D-RNAI compared to d-
 CC RNA due to lower binding interaction between DNA-RNA duplexes than RNA-
 CC RNA duplexes. The cDNA part of a D-RNAI provides further antisense gene
 CC knockout activity in addition to the posttranscriptional gene silencing
 CC (PTGS) mechanisms of the sense-RNA template, resulting in multiple
 CC specific gene interference effects with one probe. The present sequence
 CC is a poly(dT) PCR primer used in conjunction with oligo(dC)10N primers to
 CC reverse transcribe mRNA into first strand cDNA in the method of the
 CC invention
 CC XX
 SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
 Query Match 0.3%; Score 18.2; DB 1; Length 24;
 Best Local Similarity 87.0%; Pred. No. 3.6e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 2
 RESULT 188
 ADG16129/C
 ID ADG16129 standard; DNA; 24 BP.
 XX
 AC ADG16129;
 XX
 DT 26-FEB-2004 (first entry)
 XX
 DE Compound activity characterisation-related oligonucleotide SeqId4.
 XX
 KM compound activity characterisation; cellular activity;
 KM phenotypic attribute; candidate medicine; candidate treatment;
 KM multiple biological descriptor; cell marker; ss.
 XX
 OS Unidentified.
 XX
 PN WO200181895-A2.
 XX
 PD 01-NOV-2001.
 XX
 PF 24-APR-2001; 2001WO-US013248.
 XX
 XX 26-APR-2000; 2000US-019778P.
 PR 20-FEB-2001; 2001US-00790214.
 XX

PA (CYTO-) CYTOKINETICS INC.
 XX
 PI Oestreicher DR, Sabry JH, Adams CL, Vaisberg EA, Crompton AM;
 XX WPI, 2002-041423/05.
 DR
 XX
 XX Characterizing cellular activity of compound, by receiving images of
 PT cells with known activity and images of cells treated with compound,
 PT characterizing phenotypic attributes of images and comparing the
 PT phenotypes.
 XX
 PS disclosure; Fig 18; 139pp; English.
 XX
 CC This invention relates to a novel method for the characterisation of the
 CC activity of a compound on cell. The method involves receiving images of
 CC cells with a cellular activity and images of other cells treated with the
 CC compound, quantitatively characterising phenotypic attributes of the
 CC image of cells with a cellular activity to produce a target phenotype for
 CC the cellular activity and that of the image of other cells to produce a
 CC second phenotype for the compound, and comparing the two phenotypes to
 CC determine whether the compound possesses cellular activity. The invention
 CC may be useful for characterising cellular activity of a compound, for
 CC determining information about properties of substances based upon the
 CC information about structure of living or non-living cells exposed to
 CC substances. The invention is also useful for identifying promising
 CC candidates in a search for new and better medicines and treatments using
 CC multiple biological descriptors from a single cell markers or components.
 XX
 SQ Sequence 24 BP; 0 A; 1 C; 0 G; 23 T; 0 U; 0 Other;
 Query Match 0.3%; Score 18.2; DB 1; Length 24;
 Best Local Similarity 87.0%; Pred. No. 3.6e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 2
 RESULT 189
 ABX79809/C
 ID ABX79809 standard; cDNA; 24 BP.
 XX
 AC ABX79809;
 XX
 DT 17-APR-2003 (first entry)
 XX
 DE EST polymorphic DNA repeat polymucleotide #134.
 XX
 KM EST; expressed sequence tag; ss; polymorphic repeat; tandem repeat;
 KM polymorphic marker prediction of ubiquitous simple sequences; ROPPOUS;
 KM Rep-X; human; genetic disease; drug-treatment; Machado-Joseph;
 KM Haw River syndrome; Huntington's disease; fragile-X syndrome;
 KM Friedreich's ataxia; myotonic dystrophy; hyperandrogenaemia;
 KM spinal atrophy; bulbar atrophy; spinocerebellar ataxia.
 XX
 OS Homo sapiens.
 XX
 PN US6472154-B1.
 XX
 PD 29-OCT-2002.
 XX
 PF 31-DEC-1999; 99US-00475947.
 XX
 PR 31-DEC-1999; 99US-00475947.
 XX
 PA (TEXA) UNIV TEXAS SYSTEM.
 XX
 PI Garner HR, Wren JD, Minna JD, Fondon JW;
 XX WPI, 2003-208818/20.
 DR
 XX Identifying a candidate polymorphic repeat within a coding sequence, for

```
PT understanding or treating genetic disease, comprises detecting tandem
PT repeats in a target coding sequence and scoring the repeats for
PT polymorphic probability.
XX
XX Example; Col 579; 588bp; English.
XX
CC The invention discloses a method for identifying a candidate polymorphic
CC repeat within a coding sequence (expressed sequence tag, EST), which
CC comprises detecting tandem repeats in a target coding sequence, scoring
CC the repeats for polymorphic probability and generating a dataset
CC correlating the repeats with polymorphic probability to identify a
CC candidate polymorphic repeat. The computational methods (polymorphic
CC marker prediction of ubiquitous simple sequences, POWPOUS, and Rep-X) are
CC useful for identifying and detecting candidate polymorphic repeats in
CC human genes, which can be used to understand, treat or eliminate genetic
CC diseases, predispositions or adverse drug-treatment reactions. Examples
CC of diseases linked to nucleotide repeats are Machado-Joseph, Haw River
CC syndrome, Huntington's disease, fragile-X syndrome, Friedreich's ataxia,
CC myotonic dystrophy, hyperandrogenaemia, spinal and bulbar atrophy and
CC spinocerebellar ataxia. The sequences presented in ABX79676-ABX80022 are
CC the polymorphic repeats identified for a search of human ESTs
XX
SQ Sequence 24 BP; 0 A; 1 C; 0 G; 23 T; 0 U; 0 Other;
Query Match 0.3%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAATCAAAAAAGAAAAA 5415
Db 23 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 190
ID ABZ80181/c
AC ABZ80181;
XX
XX 23-MAY-2003 (first entry)
XX
DE Immunostimulatory oligonucleotide SEQ ID NO:53.
XX
KW Immunostimulation; immune response; natural killer cell; interferon;
KW type 1 interferon; IFN; cancer; infectious disease; allergic disorder;
XX immune related disorder; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..24
XX /*tag= a
XX /mod_base= OTHER
XX /note="optionally phosphorochioate backbone"
XX
XX WO2003015711-A2.
XX
XX 27-FEB-2003.
XX
XX 19-AUG-2002; 2002WO-US026468.
XX
XX 17-AUG-2001; 2001US-0313273P.
XX 03-JUL-2002; 2002US-0393952P.
XX
XX (COLE-) COLEY PHARM GROUP INC.
XX (COLE-) COLEY PHARM GMBH.
XX (IOWA ) UNIV IOWA RES FOUNDD.
XX
XX Krieg AM, Vollmer J, Ullman E;
XX
XX MPI; 2003-268241/26.
XX
XX New immunostimulatory nucleic acid, useful for preparing a composition
PT
```

```
PT for treating an allergic condition.
XX
XX Example 1; Page 44; 115pp; English.
XX
XX The present invention describes immunostimulatory nucleic acids of 14-100
XX nucleotides in length comprising the formula 5' X1DCGXH2 3' (I), where X1
XX or X2 = independently any sequence 0-10 nucleotides; D = nucleotide other
XX than C; C = cytosine; G = guanine; H = nucleotide other than G. The
XX immunostimulatory nucleic acid further comprises a sequence consisting of
XX P and N positioned immediately 5' to X1 or 3' to X2 and N is a B cell
XX neutralising sequence, where N begins with a CGG trinucleotide and is at
XX least 10 nucleotides long and P is GC-rich palindrome containing sequence
XX at least 10 nucleotides long. Also described: (1) a pharmaceutical
XX composition comprising the immunostimulatory nucleic acid and a carrier;
XX and (2) treating an allergic condition. (I) has antiallergic activity and
XX can be used in gene therapy. (I) can be used for preparing a composition
XX for treating a variety of immune related disorders such as cancer,
XX infectious diseases and allergic disorders. (I) also stimulates the
XX activation of natural killer cells and the production of type 1
XX interferon (IFN). The present sequence represents an immunostimulatory
XX oligonucleotide, which is used in an example from the present invention
XX
SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
Query Match 0.3%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAATCAAAAAAGAAAAA 5415
Db 24 AAAAAAAAAAAAAAAAAAAAAA 2
RESULT 191
ID ACA62284/c
AC ACA62284;
XX
XX 12-AUG-2003 (first entry)
XX
XX Oligo (dT)24 RT-PCR primer.
XX
XX ss; PCR; RT-PCR; primer; reverse transcriptase PCR; antisense therapy;
XX mRNA expression profile; promoter containing primer.
XX
XX Synthetic.
XX
XX US2003022318-A1.
XX
XX 30-JAN-2003.
XX
XX 07-SEP-2001; 2001US-00949305.
XX
XX 25-JAN-2000; 2000US-00494212.
XX
XX (EPIC-) EPICLONE INC.
XX
XX Lin S, Ying S;
XX
XX MPI; 2003-479488/45.
XX
XX Improved polymerase thermocycling reaction for nucleic acid
XX amplification, by thermal cycling of promoter-linked nucleic acid
XX template synthesis and in vitro transcriptional amplification of nucleic
XX acid sequences.
XX
XX Example 7; Page 14; 28pp; English.
XX
XX The invention relates to an improved polymerase thermocycling reaction
XX (M1) for linear amplification of nucleic acid sequences, involves
XX denaturing a number of nucleic acid templates (I) combining the
XX denatured (I) with a promoter-containing primer (P1), a primer (P2), a
```

CC number of deoxynucleotide triphosphates and ribonucleotide triphosphates,
 CC a reverse transcriptase enzyme, a DNA-dependent DNA polymerase and RNA
 CC polymerase, contacting P1 with (1) to generate a number of promoter-
 CC containing templates, denaturing the promoter-containing templates,
 CC contacting P2 with the denatured promoter-containing templates to
 CC generate a number of promoter-containing double-stranded DNA templates,
 CC where the double-stranded nucleic acid templates are flanked by P1 in one
 CC end and P2 in the other end of the other orientation, transcribing the
 CC promoter-containing double-stranded DNA templates to form a number of
 CC amplified RNA sequences, including the primer region of the promoter-
 CC containing double-stranded DNA templates, contacting the amplified RNA
 CC sequences with P2 to form a number of cDNAs and a number of DNA-RNA
 CC hybrid templates, and denaturing the DNA-RNA hybrid templates. The method
 CC is useful for improved polymerase thermocycling reaction for linear
 CC amplification of nucleic acid sequences, and thus for producing mRNA
 CC expression profile of a cell by M1 to generate multiple copies of the
 CC mRNA. M1 is also useful for determining aberrant protein production of
 CC cells in a diseased state, by generating an expression profile by the
 CC above method, of cells in both normal and diseased states, comparing the
 CC expression profile of the cells in the normal and diseased states,
 CC determining the differences in mRNA composition of the cell(s) in the
 CC diseased state, isolating the mRNA sequences of cell(s) in the diseased
 CC state that differ from mRNA in cell(s) in non-diseased state, amplifying
 CC the isolated mRNA by M1, and determining aberrant protein function of the
 CC protein coded for by the isolated mRNA. M1 is also useful for treating a
 CC cell in a diseased state caused by aberrant protein production, by
 CC determining protein expression of a cell in a diseased state, determining
 CC the mRNA sequence for the aberrant proteins, synthesizing an antisense
 CC sequence of the mRNA, amplifying the antisense mRNA sequences by M1, and
 CC delivering a pharmaceutically effective dosage of a composition
 CC comprising the anti-sense mRNA and a compatible lipid based biological
 CC carrier. M1 is also useful for predicting the efficacy of a proposed drug
 CC targeted against an aberrant protein, by determining aberrant protein
 CC production of cell in a diseased state by the above method, amplifying
 CC the aberrant protein by M1 and using recombinant techniques to determine
 CC the effect of proposed drug on the aberrant protein. M1 is also useful
 CC for differential screening of tissue-specific gene expression at a
 CC cellular level, for preparing labeled RNA/DNA probes for a gene chip
 CC technology, and for determining the efficacy of a drug regimen against a
 CC gene or its cDNAs. The present sequence is an Oligo (dT)24 RT-(reverse
 CC transcriptase) PCR primer used to produce first strand cDNA in the method
 CC of the invention

SO Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.3%; Score 18.2; DB 1; Length 24;
 Best Local Similarity 87.0%; Pred. No. 3.6e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 2

RESULT 192
 ACD99729/c
 ID ACD99729 standard; DNA; 24 BP.
 AC ACD99729;
 XX
 XX
 DT 25-SEP-2003 (first entry)
 XX
 XX
 DE Immunostimulatory nucleic acid #415.
 XX
 XX Immunostimulatory; antiinflammatory; dermatological; antipeoriatic;
 KM antitumor; gene therapy; vaccine; non-allergic inflammatory disease;
 KM psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
 KM inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
 XX
 XX Synthetic.
 OS
 XX
 XX US2003050268-A1.
 PN
 XX

PD 13-MAR-2003.
 XX
 PF 29-MAR-2002; 2002US-00112653.
 XX
 XX 29-MAR-2001; 2001US-0279642P.
 PR
 XX (KRIE/) KRIEG A M.
 PA (BERG/) BERG D J.
 XX
 PI Krieg AM, Berg DJ;
 XX
 XX WPI; 2003-521815/49.
 DR
 XX
 PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
 PT disease by administering an immunostimulatory nucleic acid.
 PS Disclosure; Page 20; 229pp; English.
 XX
 CC The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory
 CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid

SO Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.3%; Score 18.2; DB 1; Length 24;
 Best Local Similarity 87.0%; Pred. No. 3.6e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 2

RESULT 193
 ACH03285
 ID ACH03285 standard; DNA; 24 BP.
 AC ACH03285;
 XX
 XX
 DT 25-SEP-2003 (first entry)
 XX
 XX
 DE Immunostimulatory nucleic acid #920.
 XX
 XX Immunostimulatory; antiinflammatory; dermatological; antipeoriatic;
 KM antitumor; gene therapy; vaccine; non-allergic inflammatory disease;
 KM psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
 KM inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
 XX
 XX Synthetic.
 OS
 XX
 XX US2003050268-A1.
 PN
 XX
 XX 13-MAR-2003.
 PD
 XX
 PF 29-MAR-2002; 2002US-00112653.
 XX
 XX 29-MAR-2001; 2001US-0279642P.
 PR
 XX (KRIE/) KRIEG A M.
 PA (BERG/) BERG D J.
 XX
 PI Krieg AM, Berg DJ;
 XX
 XX WPI; 2003-521815/49.
 DR
 XX
 PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 PT allergic contact dermatitis, latex dermatitis or inflammatory bowel

PT disease by administering an immunostimulatory nucleic acid.
 XX Disclosure; Page 34; 229pp; English.
 XX
 CC The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory
 CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid
 XX
 SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.3%; Score 18.2; DB 1; Length 24;
 Best Local Similarity 87.0%; Pred. No. 3.6e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 23
 RESULT 194
 ACH03284/C
 ID ACH03284 standard; DNA; 24 BP.
 XX
 AC ACH03284;
 XX
 DT 25-SEP-2003 (first entry)
 XX
 DE Immunostimulatory nucleic acid #919.
 XX
 KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
 KW anticler; gene therapy; vaccine; non-allergic inflammatory disease;
 KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
 KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
 XX
 OS Synthetic.
 XX
 PN US2003050268-A1.
 XX
 PD 13-MAR-2003.
 XX
 PF 29-MAR-2002; 2002US-00112653.
 XX
 PR 29-MAR-2001; 2001US-0279642P.
 XX
 PA (KRIE/) KRIEG A M.
 PA (BERG/) BERG D J.
 XX
 PI Krieg AM, Berg DJ;
 XX
 DR WPI, 2003-521815/49.
 XX
 PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
 PT disease by administering an immunostimulatory nucleic acid.
 XX
 PS Disclosure; Page 34; 229pp; English.
 XX
 CC The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory
 CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid
 XX
 SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.3%; Score 18.2; DB 1; Length 24;
 Best Local Similarity 87.0%; Pred. No. 3.6e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 2
 RESULT 195
 ADA66379
 ID ADA66379 standard; mRNA; 24 BP.
 XX
 AC ADA66379;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE mRNA poly A.
 XX
 KW ss; nucleic acid amplification; multiple step elimination;
 KW varying reaction condition elimination; poly A tract.
 XX
 OS Unidentified.
 XX
 FH Key Location/Qualifiers
 FT primer_bind 1..24
 FT /tag=a
 FT /note="Binds to nucleotides 42-19 of the 1st strand cDNA
 FT synthesis primer"
 XX
 PN US6582938-B1.
 XX
 PD 24-JUN-2003.
 XX
 PF 11-MAY-2001; 2001US-00854317.
 XX
 PR 11-MAY-2001; 2001US-00854317.
 XX
 PA (AFFY-) AFFYMETRIX INC.
 XX
 PI Su X, Dong H, Ryder TB;
 XX
 DR WPI, 2003-656427/62.
 XX
 PT Amplification of nucleic acids, where the promoter is blocked from
 PT extension at the 3' end, useful for eliminating multiple step reactions.
 XX
 PS Disclosure; Fig 2; 9pp; English.
 XX
 CC The invention relates to a method of amplification of nucleic acid which
 CC comprises primer extension by reverse transcriptase and hybridizing an
 CC oligonucleotide to the single stranded DNA, where the oligonucleotide is
 CC blocked from extension at the 3' end. The method is useful for
 CC amplification of nucleic acids. In the new method, a promoter is
 CC protected from degradation throughout the method. The promoter is
 CC constructed so that it does not serve as a primer for extension of a
 CC sequence that is complementary to the target sequence, i.e. it is
 CC blocked. The method can be combined with other processes to eliminate the
 CC need for multiple steps and varying reaction conditions and their
 CC associated problems. At least three otherwise separate enzymatic
 CC reactions can occur consecutively in one phase (i.e., without organic
 CC extraction and precipitation), more preferably in the same reaction
 CC vessel. Preferably, cDNA synthesis according to the new method may occur
 CC in a modified low salt buffer. The present sequence represents the poly A
 CC tract of a mRNA used to illustrate the method of the invention.
 XX
 SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.3%; Score 18.2; DB 1; Length 24;
 Best Local Similarity 87.0%; Pred. No. 3.6e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415

PS Disclosure; Page 18; 221pp; English.

CC The invention relates to a method of treating or preventing allergy or
 CC asthma which comprises administering to a subject a poly-G nucleic acid
 CC in an aerosol formulation. The methods and compositions of the present
 CC invention are useful for diagnosing and/or treating asthma and allergy
 CC especially in a hypo-responsive subject. The present sequence represents
 CC an immunostimulatory nucleic acid of the invention.

XX Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 18.2; DB 1; Length 24;
 Best Local Similarity 87.0%; Pred. No. 3.6e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

DB 5393 AAAAAAAAAACAAAGAAAAA 5415
 1 AAAAAAAAAAAAAAAAAAAAAA 23

RESULT 199
 ADD31867/c
 ID ADD31867 standard; DNA; 24 BP.
 AC ADD31867;
 XX
 XX 15-JAN-2004 (first entry)
 DT
 XX Butterfly biliverdin binding protein BBP-Bix oligonucleotide SEQ ID:106.
 DE
 XX recombination product; synthetic gene technology; butterfly;
 KW biliverdin binding protein; ss.
 KM
 XX synthetic.
 OS
 XX WO2003064611-A2.
 PN
 XX 07-AUG-2003.
 PD
 XX 29-JAN-2003; 2003WO-US002612.
 PF
 XX 30-JAN-2002; 2002US-00062188.
 PR
 XX (EGEA-) EGEA BIOSCIENCES INC.
 PA
 XX Evans GA;
 PI
 XX WPI; 2003-663477/62.
 DR
 XX
 XX Creating recombination products between two distinct nucleotide
 PT sequences, useful in the field of synthetic gene technology, and in
 PT assembling a library, or a population or a collection of polypeptide
 PT variants.

XX Example 3; SEQ ID NO 106; 132pp; English.

PS The present invention describes a method for creating a collection of
 CC recombination products between two nucleotide sequences. The method
 CC comprises combining an initial set of oligonucleotides corresponding to a
 CC first nucleotide sequence with a subsequent set of oligonucleotides
 CC corresponding to a distinct nucleotide sequence and further combining the
 CC initial and subsequent sets of combination oligonucleotides having a
 CC sequence region corresponding to the initial nucleotide sequence and a
 CC sequence region corresponding to the second oligonucleotide sequence.
 CC Also described is a method of creating a collection of recombination
 CC products between two genes. The methods and compositions of the present
 CC invention are useful in the field of synthetic gene technology, and more
 CC specifically, to generating a collection of recombination products
 CC between distinct nucleotide sequences. They can also be used in
 CC assembling a library, or a population or a collection of polypeptide
 CC variants that correspond to single or multiple polynucleotide
 CC recombination products. The present sequence is used in the
 CC exemplification of the present invention.

XX Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 18.2; DB 1; Length 24;
 Best Local Similarity 87.0%; Pred. No. 3.6e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

DB 5393 AAAAAAAAAACAAAGAAAAA 5415
 24 AAAAAAAAAAAAAAAAAAAAAA 2

RESULT 200
 ADE25524/c
 ID ADE25524 standard; DNA; 24 BP.
 AC ADE25524;
 XX
 XX 29-JAN-2004 (first entry)
 DT
 XX Rolling circle amplification related probe control oligo POS1/2.
 DE
 XX RCA; rolling circle amplification; genotyping;
 KW single-nucleotide polymorphism; single base extension; SBE;
 KM immuno-hybridisation; probe; ss.
 XX
 XX Synthetic.
 OS
 XX
 XX Key Location/Qualifiers
 FH modified_base 24
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "optional biotin label"
 XX
 XX PN WO2003066817-A2.
 XX
 XX 14-AUG-2003.
 PD
 XX 06-FEB-2003; 2003WO-US003533.
 PF
 XX 06-FEB-2002; 2002US-0355374P.
 PR
 XX (AMSH) AMERSHAM BIOSCIENCES AB.
 PA
 XX Xia J;
 PI
 XX WPI; 2003-697450/66.
 DR
 XX
 XX Detecting nucleic acid targets, useful e.g. for diagnosing single
 PT nucleotide polymorphisms, by extension of capture probe complementary to
 PT open circle probe.

XX Example 1; Fig 5; 66pp; English.

PS The invention is directed to novel methods of amplifying and detecting
 CC DNA using rolling circle amplification (RCA). The invention relates to
 CC detecting a target sequence (I), which involves using a capture probe
 CC (CP) that is complementary to an open circle probe and includes a
 CC cleavage site. The method comprises: attaching a capture probe (CP) to a
 CC substrate, at both ends, where the CP includes one domain complementary
 CC to an OCP (open circle probe) and a second domain that contains a
 CC cleavage site (CS), to form a device; treating CP with (I) and OCP for
 CC form a hybridisation complex (HC); treating HC with a ligase so that OCP
 CC is circularised, forming a second complex (HC2); treating CP with a
 CC cleavage agent, to cut at CS, and adding an extension enzyme (EE) and
 CC nucleotide triphosphates (NTPs) to form an extended CP, which is
 CC detected. The method is used for detecting (I) that comprises two target
 CC domains (TD1, TD2) and (I) that comprises two adjacent target domains.
 CC The method is used for detection, genotyping and/or quantification of
 CC target sequences, for research, clinical use, quality control or field
 CC testing, particularly detection of single-nucleotide polymorphisms. The
 CC method permits a high level of multiplexing, and since it provides
 CC localized product detection, with linear kinetics, is sensitive enough

CC for direct detection and quantitation of unmodified targets. The present
CC sequence is that of a single base extension (SBE) probe used in SNP
CC genotyping with RCA signal amplification to demonstrate the method of the
CC invention.

XX Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.3%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAATACAAAAAGAAAAA 5415

DB 24 AAAAAAAAAAAAAAAAAAAAAA 2

RESULT 201
AAD62664/c
ID AAD62664 standard; DNA; 24 BP.

XX AAD62664;

XX 12-FEB-2004 (first entry)

DE Immunostimulatory T-rich oligonucleotide #2183.

XX Antibody dependent cellular cytotoxicity; ADCC; immune response; wart;
XX imidazoquinoline agent; asthma; allergy; infectious disease; cancer;
XX cytotoxic; antimicrobial; dermatological; virucide; ss.

XX Unidentified.

PN US2003139364-A1.

XX 24-JUL-2003.

PF 15-OCT-2002; 2002US-00272502.

PR 12-OCT-2001; 2001US-0329208P.

XX (IOWA) UNIV IOWA RES FOUND.

PI Krieg AM, Schetter C, Bratzler RL, Vollmer J, Jurk M, Bauer S;

XX WPI; 2003-829705/77.

XX Stimulating antibody dependent cellular cytotoxicity, modulating immune
PT response and inducing antigen-specific immune response in subject by
PT administering imidazoquinoline agents in conjunction with other agents.

XX Disclosure; Page 11; Opp; English.

XX The invention relates to methods for stimulating antibody dependent
CC cellular cytotoxicity (ADCC), for modulating immune response and for
CC inducing antigen-specific immune response which involve administering
CC imidazoquinoline agents in conjunction with other agents. The method is
CC useful for stimulating ADCC in a subject having a disorder chosen from
CC asthma/allergy, infectious disease, cancer and warts. The present
CC sequence is an immunostimulatory oligonucleotide used to illustrate the
CC method of the invention

XX Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.3%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAATACAAAAAGAAAAA 5415

DB 24 AAAAAAAAAAAAAAAAAAAAAA 2

RESULT 202

ACAS8802/c
ID ACAS8802 standard; DNA; 24 BP.

XX ACAS8802;

XX 10-JUN-2003 (first entry)

DE Gastric ulcer treatment immunostimulatory nucleic acid #148.

XX Gastric ulcer; ss; immunostimulant; equine gastric ulcer syndrome; EGUS;
XX Helicobacter pylori.

XX Synthetic.

PN US2002198165-A1.

XX 26-DEC-2002.

PF 01-AUG-2001; 2001US-00920313.

PR 01-AUG-2000; 2000US-0222248P.

XX (BRAT/) BRATZLER R L.

XX (PETE/) PETERSEN D M.

PI Bratzler RL, Petersen DM;

XX WPI; 2003-370798/35.

XX Prevention or treatment of gastric ulcer involves administering nucleic
PT acid.

PS Disclosure; Page 14; 45pp; English.

XX The invention relates to a method of prevention or treatment of gastric
CC ulcer comprising administering a nucleic acid to a subject in need for
CC treatment of gastric ulcer. A nucleic acid sample comprising
CC oligonucleotide 2006 was administered to a mouse model by an oral route
CC or a vehicle control. Colonisation of mice by Helicobacter pylori was
CC assessed at time points from 1 day to 1 month after treatment. The
CC ability of the nucleic acid to reduce H. pylori colonisation was
CC assessed. The method is useful for preventing or treating a gastric ulcer
CC on a subject e.g. human or non-human vertebrate animal including dog,
CC cat, horse (equine gastric ulcer syndrome, EGUS), cow, goat, sheep, pig,
CC rabbit, turkey, chicken, primate, rat and mouse. The method effectively
CC treats or prevents gastric ulcers. The present sequence represents an
CC immunostimulatory nucleic acid for the treatment of gastric ulcers

XX Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.3%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAATACAAAAAGAAAAA 5415

DB 24 AAAAAAAAAAAAAAAAAAAAAA 2

RESULT 203
ADG75922/c
ID ADG75922 standard; DNA; 24 BP.

XX ADG75922;

XX 11-MAR-2004 (first entry)

DE Immunostimulatory non-CpG oligonucleotide IMT 177 SeqID 24.

XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
XX proliferation; differentiation; cytokine; antibody production; B-cell;
XX plasmacytoid dendritic cell; immunomodulatory; gene therapy;
XX chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;

```
KW renal cell carcinoma.
XX
XX Synthetic.
OS
XX MO2003101375-A2.
XX
XX 11-DEC-2003.
PD
XX
XX 30-MAY-2003; 2003WO-EP005691.
PF
XX
XX 30-MAY-2002; 2002CA-02388049.
PR
XX
XX (IMMU-) IMMUNOTECH SA.
PA
XX
XX Lopez RA;
PI
XX
XX WPI; 2004-053333/05.
DR
XX
XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
PT acid sequence motif, useful for inducing B-cell activation, treating,
PT preventing or ameliorating immune system disorder or tumoral disease e.g.
PT melanoma.
XX
XX Claim 14; SEQ ID NO 24; 139pp; English.
PS
XX
XX This invention relates to novel immunostimulatory oligonucleotides that
XX contain a non-palindromic sequence motif. Specifically, it refers to DNA
XX oligonucleotides (without a Cpg motif), which can stimulate an immune
XX response in animals of the order of primate, including humans. The immune
XX response is characterised by the proliferation, differentiation, cytokine
XX and antibody production in B-cells, as well as cell differentiation and
XX cytokine production in plasmacytoid dendritic cells. The present
XX invention describes immunomodulator compositions that also comprise an
XX antigen selected from, for example, viruses, bacteria, parasites, tumour
XX cells and glycolipids. As such, these DNA oligos can be used in gene
XX therapy for inducing B-cell activation, treating, preventing or
XX ameliorating an immune system disorder or a tumoral disease including
XX chronic myelogenous leukemia, melanoma, Kaposi's sarcoma, and renal cell
XX carcinoma. This oligonucleotide sequence is an immunostimulatory non-Cpg
XX variant DNA oligo, used in an exemplification of the invention.
SQ
XX
XX Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;
Query Match 0.3%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5403 AAAAAAGAAAAATGAAAAATAAA 5425
DB 23 AAAAAAACAAATGAAAAAAA 1
RESULT 204
ADG75917/C
ID ADG75917 standard; DNA; 24 BP.
XX
XX ADG75917;
XX
XX 11-MAR-2004 (first entry)
DT
XX
XX Non-Cpg DNA oligonucleotide IMT 053 SegID 19.
DE
XX
XX ss; Cpg; immunostimulatory; non-palindromic; immune response;
KW proliferation; differentiation; cytokine; antibody production; B-cell;
KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
KW chronic myelogenous leukemia; melanoma; Kaposi's sarcoma;
KW renal cell carcinoma.
XX
XX Synthetic.
OS
XX
XX MO2003101375-A2.
XX
XX 11-DEC-2003.
PD
```

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XX
XX 30-MAY-2003; 2003WO-EP005691.
PF
XX
XX 30-MAY-2002; 2002CA-02388049.
PR
XX
XX (IMMU-) IMMUNOTECH SA.
PA
XX
XX Lopez RA;
PI
XX
XX WPI; 2004-053333/05.
DR
XX
XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
PT acid sequence motif, useful for inducing B-cell activation, treating,
PT preventing or ameliorating immune system disorder or tumoral disease e.g.
PT melanoma.
XX
XX Example 3; SEQ ID NO 19; 139pp; English.
PS
XX
XX This invention relates to novel immunostimulatory oligonucleotides that
XX contain a non-palindromic sequence motif. Specifically, it refers to DNA
XX oligonucleotides (without a Cpg motif), which can stimulate an immune
XX response in animals of the order of primate, including humans. The immune
XX response is characterised by the proliferation, differentiation, cytokine
XX and antibody production in B-cells, as well as cell differentiation and
XX cytokine production in plasmacytoid dendritic cells. The present
XX invention describes immunomodulator compositions that also comprise an
XX antigen selected from, for example, viruses, bacteria, parasites, tumour
XX cells and glycolipids. As such, these DNA oligos can be used in gene
XX therapy for inducing B-cell activation, treating, preventing or
XX ameliorating an immune system disorder or a tumoral disease including
XX chronic myelogenous leukemia, melanoma, Kaposi's sarcoma, and renal cell
XX carcinoma. This oligonucleotide sequence is the non-Cpg DNA oligo IMT
XX 053, used in an exemplification of the invention.
SQ
XX
XX Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
Query Match 0.3%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 3.6e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAATGCAAAAAAGAAAAA 5415
DB 24 AAAAAAATAAAAAAATAAAAAA 2
RESULT 205
AAQ95960/C
ID AAQ95960 standard; DNA; 25 BP.
XX
XX AAQ95960;
XX
XX 06-FEB-1996 (first entry)
DT
XX
XX Oligonucleotide biotin-125 for novel nucleic acid immobilisation method.
DE
XX
XX Immobilisation; solid support; salt; cationic detergent; capture probe;
KW hybridisation; primer; template-dependent extension; target organism;
KW sequencing; genetic polymorphism; ss.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FH misc_feature 1
FT /tag= a
FT /note= "biotinylated"
XX
XX MO9515970-A1.
XX
XX 15-JUN-1995.
PD
XX
XX 06-DEC-1994; 94WO-US014096.
PF
XX
XX 06-DEC-1993; 93US-00162397.
PR
```


PR 16-NOV-1994; 94US-00341148.
 XX (MOLE-) MOLECULAR TOOL INC.
 XX
 PI Nikiforov T, Knapp MR;
 XX
 DR WPI; 1995-224282/29.
 XX
 PT Immobilizing synthetic nucleic acid on solid support - by incubation in
 PT presence of salt or cationic detergent, for use in hybridisation assays,
 PT sequencing and analysis of polymorphism.
 XX
 PS Example 1; Page 18; 61pp; English.
 XX
 CC Oligonucleotides AAQ95959-82 are examples of oligonucleotides used in a
 CC novel method of immobilising oligonucleotides to a solid support by
 CC incubating in the presence of a salt or cationic detergent e.g. NaCl (50-
 CC 250 mM, pH 6.0-8.0) or 1-ethyl-3-(3'-dimethyl amino propyl)-1,3
 CC carbodiimide hydrochloride (EDC). The oligonucleotides can be capture
 CC probes for detection of specific nucleic acids by hybridisation or can be
 CC primers for template-dependent extension from the immobilised primers on
 CC nucleic acid from a target organism. The method can be used in
 CC hybridisation assays, sequencing and analysis of genetic polymorphism
 XX
 SQ Sequence 25 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
 Query Match 0.3%; Score 18.2; DB 1; Length 25;
 Best Local Similarity 87.0%; Pred. No. 3.7e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 5393 AAAAATACAAAAGAAAAA 5415
 Db 25 AAAAAAAAAAAAAAAAAAAAAA 3
 RESULT 206
 AAX84258/c
 ID AAX84258 standard; DNA; 25 BP.
 AC AAX84258;
 DT 08-SEP-1999 (first entry)
 XX
 XX PCR primer for human Nck associated protein 1 coding sequence.
 DE
 XX Nck associated protein 1; Nap1; human; apoptosis; Alzheimer's disease;
 KM therapy; PCR primer; 89.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO9931239-A1.
 PD 24-JUN-1999.
 XX
 PF 14-DEC-1998; 98WO-JP005646.
 XX
 PR 15-DEC-1997; 97JP-00363183.
 XX
 PA (KYOW) KYOWA HAKKO KOGYO KK.
 PA (SAKA/) SAKAKI Y.
 XX
 PI Sakaki Y;
 PT WPI; 1999-395181/33.
 XX
 PT Protein inhibiting apoptosis, useful in the diagnosis and treatment of
 PT Alzheimer's disease.
 XX
 PS Example 1; Page 76; 90pp; Japanese.
 XX
 CC This sequence represents a PCR primer used to isolate DNA encoding the
 CC human Nck associated protein 1 (Nap1) of the invention. Nap1 inhibits
 CC human Nck associated protein 1 (Nap1) of the invention. Nap1 inhibits

CC apoptosis. The protein can be used in the investigation, diagnosis and
 CC treatment (e.g. by gene therapy) of Alzheimer's disease
 XX
 SQ Sequence 25 BP; 0 A; 0 C; 1 G; 24 T; 0 U; 0 Other;
 Query Match 0.3%; Score 18.2; DB 1; Length 25;
 Best Local Similarity 87.0%; Pred. No. 3.7e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 5393 AAAAATACAAAAGAAAAA 5415
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 2
 RESULT 207
 AAX84260/c
 ID AAX84260 standard; DNA; 25 BP.
 AC AAX84260;
 DT 08-SEP-1999 (first entry)
 XX
 XX PCR primer for human Nck associated protein 1 coding sequence.
 DE
 XX Nck associated protein 1; Nap1; human; apoptosis; Alzheimer's disease;
 KM therapy; PCR primer; 89.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO9931239-A1.
 PD 24-JUN-1999.
 XX
 PF 14-DEC-1998; 98WO-JP005646.
 XX
 PR 15-DEC-1997; 97JP-00363183.
 XX
 PA (KYOW) KYOWA HAKKO KOGYO KK.
 PA (SAKA/) SAKAKI Y.
 XX
 PI Sakaki Y;
 PT WPI; 1999-395181/33.
 XX
 XX Protein inhibiting apoptosis, useful in the diagnosis and treatment of
 PT Alzheimer's disease.
 PT Disclosure; Page 77; 90pp; Japanese.
 XX
 CC This sequence represents a PCR primer used to isolate DNA encoding the
 CC human Nck associated protein 1 (Nap1) of the invention. Nap1 inhibits
 CC apoptosis. The protein can be used in the investigation, diagnosis and
 CC treatment (e.g. by gene therapy) of Alzheimer's disease
 XX
 SQ Sequence 25 BP; 0 A; 1 C; 0 G; 24 T; 0 U; 0 Other;
 Query Match 0.3%; Score 18.2; DB 1; Length 25;
 Best Local Similarity 87.0%; Pred. No. 3.7e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 5393 AAAAATACAAAAGAAAAA 5415
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 2
 RESULT 208
 AAA39306/c
 ID AAA39306 standard; RNA; 25 BP.
 AC AAA39306;
 DT 11-SEP-2000 (first entry)

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XX XX Rapid capture probe designated Neu-probe SEQ ID NO:1.
DE XX
XX XX Rapid detection; probe; target nucleic acid; enzymatic amplification;
KM XX isolation; detection; ss.
OS XX Synthetic.
PN XX US6060246-A.
XX XX
XX XX 09-MAY-2000.
PD XX
XX XX 13-NOV-1997; 97US-00969813.
PF XX
XX XX 15-NOV-1996; 96US-0030963P.
PR XX
XX XX (AVIB-) AVI BIOPHARMA INC.
PA XX
XX XX Wages JM, Summerton JE, Weller DJ;
PI XX
XX XX WPI; 2000-364413/31.
DR XX
XX XX
XX XX Reagent for rapidly detecting or isolating target nucleic acid sequences
PT in polynucleotide-containing sample, comprises capture component and
PT target-specific probe linked to solid substrate.
XX XX
XX XX Example 3; Col 17; 24pp; English.
PS XX
XX XX The present invention describes a rapid pairing reagent (I) for the
CC isolation or detection of a polynucleotide (N) analyte molecule having a
CC selected target base sequence, in a sample containing the analyte
CC molecule and non-target polynucleotide, comprising a capture component
CC (A) and a target-specific probe (B) linked to a solid substrate. The
CC isolated sequences are useful for enzymatic amplification. (I) is capable
CC of rapidly binding nucleic acids in the sample and placing them in close
CC proximity to target probes on the reagent, thus enabling binding under
CC low stringency. Combination of rapid capture and concentration of
CC polynucleotides with selective targeting of analyte molecules, greatly
CC enhances the isolation process. Non-ionic morpholino oligomers used as
CC probes are not extended by polymerases and therefore do not interfere
CC with amplification of target molecule. AAA39306 to AAA39316 represent
CC oligonucleotides used in the exemplification of the present invention
XX XX
XX XX Sequence 25 BP; 0 A; 0 C; 0 G; 0 T; 25 U; 0 Other;
SQ XX

Query Match 0.3%; Score 18.2; DB 1; Length 25;
Best Local Similarity 87.0%; Pred. No. 3.7e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
DB 25 AAAAAAAAAAAAAAAAAAAAAA 3

RESULT 209
AAZ30267/c
ID AAZ30267 standard; DNA; 25 BP.
XX
XX AAZ30267;
AC XX
XX 11-FEB-2000 (first entry)
DT XX
XX Capture probe CP125 specific for c-myc fusion targets.
DE XX
XX c-myc fusion; non-nucleoside spacer; capture probe;
XX nucleic acid-protein fusion; ribosome display particle; ss.
KM XX
XX Synthetic.
OS XX
XX WO951773-A1.
PN XX
XX 14-OCT-1999.
PD XX
XX

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PF 31-MAR-1999; 99WO-US007203.
XX
XX 03-APR-1998; 98US-0080686P.
PR XX
XX (PHYL-) PHYLLOS INC.
PA XX
XX Kuimelle RG, Wagner R;
PI XX
XX WPI; 2000-013048/01.
DR XX
XX
XX Attaching capture probes to solid phases through non-nucleic spacers,
PT producing arrays for detecting interactions of proteins with other
PT compounds, e.g. for drug screening.
XX XX
XX Example 8; Page 29; 57pp; English.
PS XX
XX The present sequence represents a capture probe specific for a c-myc
CC fusion target. It is used in the method of the invention. The
CC specification describes the use of non-nucleoside spacers to immobilise
CC an array of capture probes on a solid support. The solid support carries
CC an array of capture probes, each consisting of non-nucleoside spacers
CC plus an oligonucleotide to which a nucleic acid-protein fusion or a
CC ribosome display particle is bound. Non-nucleoside spacers prevent
CC interaction of proteins with the support surface, ensuring efficient
CC hybridisation between capture probes and bound nucleic acid/protein
CC fusions, while minimising denaturation of the protein which may then
CC adopt its native folded structure. The arrays of capture probes are used
CC to screen for interactions between proteins and compounds (e.g. other
CC proteins, ligands or nucleic acids), particularly to identify potential
CC therapeutic agents, enzyme substrates or unknown proteins that interact
CC with drugs, but also for diagnosis (detecting disease-associated
CC proteins) and for quantifying target molecules in a sample
XX XX
XX Sequence 25 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
SQ XX

Query Match 0.3%; Score 18.2; DB 1; Length 25;
Best Local Similarity 87.0%; Pred. No. 3.7e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
DB 25 AAAAAAAAAAAAAAAAAAAAAA 3

RESULT 210
ABK49986/c
ID ABK49986 standard; DNA; 25 BP.
XX
XX ABK49986;
AC XX
XX 15-JUL-2002 (first entry)
DT XX
XX Example oligonucleotide #2 prepared on glass-synthetic resin membrane.
DE XX
XX Glass-synthetic resin membrane; pore glass-polytetrafluoroethylene resin;
KM chromatography membrane; PTFE; ss.
XX
XX Synthetic.
OS XX
XX US6261497-B1.
PN XX
XX 17-JUL-2001.
PD XX
XX 04-MAY-1999; 99US-00305219.
PF XX
XX 21-FEB-1996; 96US-00604440.
PR XX
XX (CPG-) CPG INC.
PA XX
XX Wong YN, Chen R;
PI XX
XX WPI; 2001-534961/59.
DR XX
XX

```

PT Preparation of controlled pore glass-polycetrafluoroethylene resin
 PT chromatography membrane by heating, calendaring and sintering mixture of
 PT controlled pore glass and aqueous dispersion of polycetrafluoroethylene.
 PS Example 12; Col 8; 6pp; English.
 XX
 CC The invention relates to a method of preparing a controlled pore glass-
 CC polytetrafluoroethylene (PTFE) resin chromatography membrane, comprising
 CC combining controlled pore glass and an aqueous dispersion of PTFE to form
 CC a paste-like mass, heating the paste-like mass at 50-70 plus OC,
 CC calendaring to form a foldable sheet, and sintering the sheet to produce
 CC a rigid, porous sheet. The method prepares a controlled pore glass-PTFE
 CC resin chromatography membrane for use in various biochemical procedures.
 CC The membrane is useful in place of controlled pore glass as a support for
 CC the synthesis, isolation, and purification of nucleic acids and for the
 CC isolation and purification of proteins. The method produces a membrane
 CC that may be used in lieu of controlled pore glass. The present sequence
 CC represents an oligonucleotide prepared on the membrane in an example
 CC which demonstrates the method of the invention
 XX
 SQ Sequence 25 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
 Query Match 0.3%; Score 18.2; DB 1; Length 25;
 Best Local Similarity 87.0%; Pred. No. 3.7e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
 Db 25 AAAAAAAAAAAAAAAAAAAAAA 3
 RESULT 211
 ABV80873
 ID ABV80873 standard; DNA; 25 BP.
 AC ABV80873;
 XX
 DT 03-JAN-2003 (first entry)
 DE Human HTPPL scanning oligonucleotide SEQ ID 2119.
 XX
 KM Human; gene therapy; tumour suppressor; HTPPL; chromosome 10p12.1;
 KM human testis expressed Patched like protein; testis; adrenal; liver;
 KM male germ cell development; bone marrow; brain; kidney; lung; placenta;
 KM prostate; skeletal muscle; colon; male infertility; cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN EP1229046-A2.
 PD 07-AUG-2002.
 XX
 PF 28-JAN-2002; 2002EP-00001167.
 XX
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 23-MAY-2001; 2001US-00864761.
 PR 09-OCT-2001; 2001US-0327898P.
 XX
 PA (AEOM-) AEOMICA INC.
 PI Zhan J;
 XX
 DR WPI, 2002-676582/73.
 XX
 PT Novel isolated human testis expressed Patched like protein (HTPL), useful
 PT for identifying agonist and antagonist and specific binding partners, and
 PT for treating subjects having defects in HTPPL.
 XX

PS Example 2; Page 341; 718pp; English.
 XX
 CC The present invention relates to human testis expressed Patched like
 CC protein (HTPL, see ABV78759 to ABV78762 and AB936519 to AB936520). HTPPL
 CC has two isoforms, with a few single base pair differences between the
 CC two. One of the single base pair changes introduces a premature stop
 CC codon in HTPPL-S (S for short) compared to HTPPL-L (L for long). HTPPL
 CC shares an overall structure organisation with the Patched protein. The
 CC shared structural features strongly imply that HTPPL plays a role similar
 CC to that of Patched, and is a potential tumour suppressor. HTPPL is
 CC important in regulating male germ cell development, and the HTPPL gene was
 CC mapped to human chromosome 10p12.1. HTPPL and its coding sequence are
 CC useful for diagnosing a disorder caused by mutation in HTPPL, and in
 CC therapy and manufacture of a medicament for treatment or prevention of
 CC such disorder associated with decreased expression or activity of human
 CC HTPPL. Such disorders include disorders of testis, or adrenal, adult and
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
 CC skeletal muscle or colon function. HTPPL proteins and nucleic acids are
 CC clinically useful diagnostic markers and potential therapeutic agents for
 CC male infertility and cancer. The present oligonucleotide was used in an
 CC example from the invention
 XX
 SQ Sequence 25 BP; 5 A; 10 C; 10 G; 0 T; 0 U; 0 Other;
 Query Match 0.3%; Score 18.2; DB 1; Length 25;
 Best Local Similarity 87.0%; Pred. No. 3.7e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 772 GCCCAAGCCCGAGGAGGCGGAGG 794
 Db 2 GCCCAAGCCCGAGGCGGCGGCGG 24
 RESULT 212
 ABV80874
 ID ABV80874 standard; DNA; 25 BP.
 AC ABV80874;
 XX
 DT 03-JAN-2003 (first entry)
 DE Human HTPPL scanning oligonucleotide SEQ ID 2120.
 XX
 KM Human; gene therapy; tumour suppressor; HTPPL; chromosome 10p12.1;
 KM human testis expressed Patched like protein; testis; adrenal; liver;
 KM male germ cell development; bone marrow; brain; kidney; lung; placenta;
 KM prostate; skeletal muscle; colon; male infertility; cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN EP1229046-A2.
 PD 07-AUG-2002.
 XX
 PF 28-JAN-2002; 2002EP-00001167.
 XX
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 23-MAY-2001; 2001US-00864761.
 PR 09-OCT-2001; 2001US-0327898P.
 XX
 PA (AEOM-) AEOMICA INC.
 PI Zhan J;
 XX
 DR WPI, 2002-676582/73.
 XX
 PT Novel isolated human testis expressed Patched like protein (HTPL), useful
 PT for identifying agonist and antagonist and specific binding partners, and
 PT for treating subjects having defects in HTPPL.
 XX

PT for treating subjects having defects in HTPPL.
 XX Example 2; Page 341; 718pp; English.
 XX
 CC The present invention relates to human testis expressed Patched like
 CC protein (HTPPL, see ABY78759 to ABY78762 and ABB98519 to ABB98520). HTPPL
 CC has two isoforms, with a few single base pair differences between the
 CC two. One of the single base pair changes introduces a premature stop
 CC codon in HTPPL-S (S for short) compared to HTPPL-L (L for long). HTPPL
 CC shares an overall structure organisation with the Patched protein. The
 CC shared structural features strongly imply that HTPPL plays a role similar
 CC to that of Patched, and is a potential tumour suppressor. HTPPL is
 CC important in regulating male germ cell development, and the HTPPL gene was
 CC mapped to human chromosome 10p12.1. HTPPL and its coding sequence are
 CC useful for diagnosing a disorder caused by mutation in HTPPL, and in
 CC therapy and manufacture of a medicament for treatment or prevention of
 CC such disorder associated with decreased expression or activity of human
 CC HTPPL. Such disorders include disorders of testis, or adrenal, adult and
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
 CC skeletal muscle or colon function. HTPPL proteins and nucleic acids are
 CC clinically useful diagnostic markers and potential therapeutic agents for
 CC male infertility and cancer. The present oligonucleotide was used in an
 CC example from the invention
 XX
 SQ Sequence 25 BP; 4 A; 10 C; 11 G; 0 T; 0 U; 0 Other;
 Query Match 0.3%; Score 18.2; DB 1; Length 25;
 Best Local Similarity 87.0%; Pred. No. 3.7e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 OY 772 GCCCAAGCCGAGGAGGCGGCG 794
 Db 1 GCCCAAGCCGAGGCGGCGGCGG 23
 XX
 RESULT 213
 ABA03917/C
 ID ABA03917 standard; DNA; 25 BP.
 XX
 AC ABA03917;
 XX
 DT 18-FRB-2002 (first entry)
 XX
 DE Human connexin 9 PCR primer 2 SEQ ID NO:4.
 XX
 KM Human; connexin 9; cytosstatic; virucidal; immunomodulatory;
 KM antiinflammatory; haemostatic; malignant tumour; haemopathy;
 KM HIV infection; immunological disease; inflammation; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200181538-A2.
 XX
 PD 01-NOV-2001.
 XX
 PF 23-APR-2001; 2001WO-CN000608.
 XX
 PR 27-APR-2000; 2000CN-00115456.
 XX
 PA (BIOV-) BIOWINDOW GENE DEV INC SHANGHAI.
 XX
 PI Mao Y, Xie Y;
 XX
 DR WPI; 2002-034440/04.
 XX
 PT Human connexin 9 and encoded polynucleotide, applicable in diagnosis and
 PT treatment of malignant tumour, hemopathy, HIV infection, immunological
 PT diseases and inflammation.
 XX
 PS Example 2; Page 12; 32pp; Chinese.
 XX
 CC The present invention describes human connexin 9 (I). (I) has cytosstatic,
 CC virucidal, immunomodulatory, antiinflammatory and haemostatic activities.

CC (I) and the polynucleotide encoding it (II) are applicable in the
 CC diagnosis and treatment of malignant tumour, hemopathy, HIV infection,
 CC immunological diseases and various inflammations. The present sequence
 CC represents a PCR primer for human connexin 9, which is used in an example
 CC from the present invention
 XX
 SQ Sequence 25 BP; 3 A; 0 C; 1 G; 21 T; 0 U; 0 Other;
 Query Match 0.3%; Score 18.2; DB 1; Length 25;
 Best Local Similarity 87.0%; Pred. No. 3.7e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 OY 5392 TAAAAAATTCACAAAAAGAAAA 5414
 Db 25 TAAAAAATTCACAAAAAGAAAA 3
 XX
 RESULT 214
 ACK28658
 ID ACK28658 standard; DNA; 25 BP.
 XX
 AC ACK28658;
 XX
 DT 14-OCT-2003 (first entry)
 XX
 DE Human microarray DNA oligonucleotide SEQ ID NO 128639.
 XX
 KM EST; ss; probe; expressed sequence tag; microarray; gene expression;
 KM genetic variation; biallelic marker; polymorphism; human;
 KM cross-species comparison.
 XX
 OS Homo sapiens.
 XX
 PN US2003104410-A1.
 XX
 PD 05-JUN-2003.
 XX
 PF 15-MAR-2002; 2002US-00098263.
 XX
 PR 16-MAR-2001; 2001US-0276759P.
 XX
 PA (AFRY-) APFYMETRIX INC.
 XX
 PI Miltmann MP;
 XX
 DR WPI; 2003-567953/53.
 XX
 PT New array of nucleic acid probes, useful for in situ hybridization, in
 PT Southern, Northern or dot-blot hybridization to identify or detect the
 PT sequence or specific mutations of any gene.
 XX
 PS Claim 1; SEQ ID NO 128639; 9pp; English.
 XX
 CC The invention discloses a microarray comprising a plurality of nucleic
 CC acid probes including one of 2,018,500 fully defined sequences, or its
 CC perfect match, perfect mismatch, antisense match or antisense mismatch.
 CC Also disclosed is a method of gene expression analysis. The array is used
 CC in monitoring gene expression levels by hybridisation to a DNA library,
 CC in analysis of genetic variation or in hybridisation of tag-labelled
 CC compounds. The nucleic acid probes are specifically designed for analysis
 CC of at least one target sequence. The method of analysis comprises
 CC hybridising at least one or more nucleic acids to at least two or more
 CC nucleic acid probes and detecting the hybridisation. The nucleic acid
 CC probes are attached to a solid support. The analysis comprises monitoring
 CC gene expression levels, identifying biallelic markers or polymorphisms,
 CC or family members of a gene and a cross-species comparison. Each of the
 CC nucleic acids further comprises a tag sequence. The array of nucleic acid
 CC probes is useful in in situ hybridisation, in Southern, Northern or dot-
 CC blot hybridisation to identify or detect the sequence or specific
 CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
 CC primer extensions or in screening cDNA or genomic libraries or subclones
 CC for additional subclones containing segments of DNA that have been
 CC isolated and previously sequenced. The sequence presented is one of the

CC nucleic acid probes incorporated in the microarray. Note: The sequence
 CC data for this patent can also be obtained in electronic format directly
 CC from USPTO at seqdata.uspto.gov/sequence.html

XX Sequence 25 BP; 7 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 18.2; DB 1; Length 25;

Best Local Similarity 87.0%; Pred. No. 3.7e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3444 GGAGCAGAGAGAACTCAGCTGC 3466

DB 3 GGAGCAGAGAGATCTCAGCTAC 25

RESULT 215
 ADC54009/c
 ID ADC54009 standard; DNA; 25 BP.

XX ADC54009;

AC 18-DEC-2003 (first entry)

DE Oligonucleotide of the invention SEQ ID NO:4.

XX 89; probe carrier; discharge.

OS Synthetic.

PN JP2003035711-A.

PD 07-FEB-2003.

PF 28-MAR-2002; 2002JP-00093023.

PR 28-MAR-2001; 2001JP-00094400.

PA (CANO) CANON KK.

DR WPI; 2003-535999/51.

XX Probe carrier manufacturing method for inkjet system, involves scanning
 PT liquid discharge head in direction orthogonal to scanning direction, at
 PT angle satisfying predetermined relation.

XX Example 2; SEQ ID NO 4; 17pp; Japanese.

XX The invention relates to a novel probe carrier and the method for
 CC manufacturing the carrier. The invention enables stable discharge of
 CC solution, and removes liquid droplets adhering to discharge nozzle. The
 CC present sequence is used in the exemplification of the invention.

XX Sequence 25 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.3%; Score 18.2; DB 1; Length 25;

Best Local Similarity 87.0%; Pred. No. 3.7e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAATACAAAAAGAAAAA 5415

DB 25 AAAAAAAAAAAAAAAAAAAAAA 3

RESULT 216

ADC54008
 ID ADC54008 standard; DNA; 25 BP.

XX ADC54008;

XX 18-DEC-2003 (first entry)

XX Oligonucleotide of the invention SEQ ID NO:3.

KW 89; probe carrier; discharge.

XX Synthetic.

XX JP2003035711-A.

XX 07-FEB-2003.

XX 28-MAR-2002; 2002JP-00093023.

XX 28-MAR-2001; 2001JP-00094400.

XX (CANO) CANON KK.

XX WPI; 2003-535999/51.

XX Probe carrier manufacturing method for inkjet system, involves scanning
 PT liquid discharge head in direction orthogonal to scanning direction, at
 PT angle satisfying predetermined relation.

XX Example 2; SEQ ID NO 3; 17pp; Japanese.

XX The invention relates to a novel probe carrier and the method for
 CC manufacturing the carrier. The invention enables stable discharge of
 CC solution, and removes liquid droplets adhering to discharge nozzle. The
 CC present sequence is used in the exemplification of the invention.

XX Sequence 25 BP; 25 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.3%; Score 18.2; DB 1; Length 25;

Best Local Similarity 87.0%; Pred. No. 3.7e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAATACAAAAAGAAAAA 5415

DB 1 AAAAAAAAAAAAAAAAAAAAAA 23

RESULT 217

ADP39737/c
 ID ADP39737 standard; DNA; 25 BP.

XX ADP39737;

XX 12-FEB-2004 (first entry)

XX Probe #4; immobilised on probe array using novel method.

XX Probe array; microarray; DNA array; DNA chip; manufacture; inkjet system;
 KW electrostatic adsorption mechanism; DNA analysis;
 KW simultaneous gene detection; probe; ss.

XX Synthetic.

XX JP2003014773-A.

XX 15-JAN-2003.

XX 28-MAR-2002; 2002JP-00093024.

XX 28-MAR-2001; 2001JP-00094401.

XX (CANO) CANON KK.

XX WPI; 2003-496695/47.

XX Manufacturing of probe carrier for carrying probes for base sequence
 PT analysis of genetic deoxyribonucleic acid and simultaneous multiple item
 PT diagnosis of gene by ink jet process while removing mist of probe
 PT solution.

XX Example 2; SEQ ID NO 4; 15pp; Japanese.

```
CC The invention relates to a method and device for the manufacture of a
CC probe array. The method involves using an inkjet system to discharge a
CC probe solution through a solution discharging head, so as to form a
CC number of probes on a solid matrix. Mists of the probe solution generated
CC during probe solution discharge are caught by an electrostatic adsorption
CC mechanism. The method and device are suitable for manufacturing probe
CC arrays for analysing DNA sequences, and for the simultaneous detection of
CC multiple genes. The method and device of the invention prevent the
CC scattering of probe positions and the mixing of different probe
CC solutions. The present sequence is related to the invention.
XX
SQ Sequence 25 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
Query Match 0.3%; Score 18.2; DB 1; Length 25;
Best Local Similarity 87.0%; Pred. No. 3.7e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
DB 25 AAAAAAAAAAAAAAAAAAAAAA 3
RESULT 218
ADP39736
ID ADF39736 standard; DNA; 25 BP.
XX
AC ADF39736;
XX
DT 12-FEB-2004 (first entry)
XX
DE Target DNA sequence #3, capable of hybridising to probe #4.
XX
XX Probe array; microarray; DNA array; DNA chip; manufacture; inkjet system;
XX electrostatic adsorption mechanism; DNA analysis;
XX simultaneous gene detection; ss.
XX
OS Synthetic.
XX
PN JP2003014773-A.
XX
PD 15-JAN-2003.
XX
PF 28-MAR-2002; 2002JP-00093024.
XX
PR 28-MAR-2001; 2001JP-00094401.
XX
PA (CANO ) CANON KK.
XX
DR WPI; 2003-496695/47.
XX
XX Manufacturing of probe carrier for carrying probes for base sequence
XX analysis of genetic deoxyribonucleic acid and simultaneous multiple item
XX diagnosis of gene by ink jet process while removing mist of probe
XX solution.
XX
PS Example 2; SEQ ID NO 3; 15bp; Japanese.
XX
XX The invention relates to a method and device for the manufacture of a
XX probe array. The method involves using an inkjet system to discharge a
XX probe solution through a solution discharging head, so as to form a
XX number of probes on a solid matrix. Mists of the probe solution generated
XX during probe solution discharge are caught by an electrostatic adsorption
XX mechanism. The method and device are suitable for manufacturing probe
XX arrays for analysing DNA sequences, and for the simultaneous detection of
XX multiple genes. The method and device of the invention prevent the
XX scattering of probe positions and the mixing of different probe
XX solutions. The present sequence is related to the invention.
XX
SQ Sequence 25 BP; 25 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.3%; Score 18.2; DB 1; Length 25;
Best Local Similarity 87.0%; Pred. No. 3.7e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
DB 1 AAAAAAAAAAAAAAAAAAAAAA 23
RESULT 219
AD081145/C
ID AD081145 standard; DNA; 25 BP.
XX
AC AD081145;
XX
DT 29-JUL-2004 (first entry)
XX
DE Prion protein polymorphic microsatellite marker consensus sequence #23.
XX
XX gene typing; polymorphic microsatellite loci; PML;
XX disease predisposition; microsatellite marker; prion disease;
XX cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
XX milk protein; hormone; transcription factor; pT7-blue-vector; sheep;
XX microsatellite; ds.
XX
OS Synthetic.
XX
PN DE10236711-A1.
XX
PD 26-FEB-2004.
XX
PF 09-AUG-2002; 2002DE-01036711.
XX
PR 09-AUG-2002; 2002DE-01036711.
XX
XX (UYHO-) UNIV HOHENHEIM.
XX
PA Geldermann H, Preuss S, Han Y;
XX PI WPI, 2004-215730/21.
XX
DR Typing genes that contain polymorphic microsatellite loci, useful for
XX identifying predisposition to disease, by amplification and determining
XX length of amplicons.
XX
PS Claim 9; Page 50; 64pp; German.
XX
XX The invention describes a method of typing (M1) a gene (I) that has one
XX or more polymorphic microsatellite loci (PML). The method comprises: PCR
XX amplification of at least one DNA region of (I) that includes PML, using
XX as template a DNA sample containing at least one segment of (I); and
XX determining the length of the resulting amplicon(s). Also described are:
XX a method of determining (M2) microsatellite markers (MM) for
XX predisposition to a disease, associated with a gene that includes one or
XX more PML; and diagnosis (M3) of diseases associated with gene that
XX include PML. The method is used to identify microsatellite markers, in a
XX disease-related gene, that are associated with a predisposition to
XX diseases and for diagnosis of such diseases, especially prion diseases
XX but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
XX metabolic diseases; also to type genes that encode milk proteins,
XX hormones or transcription factors. The method is simpler, quicker and
XX particularly less expensive than known methods based on sequencing. This
XX consensus represents a prion protein polymorphic microsatellite marker
XX
SQ Sequence 25 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
Query Match 0.3%; Score 18.2; DB 1; Length 25;
Best Local Similarity 87.0%; Pred. No. 3.7e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
DB 25 AAAAAAAAAAAAAAAAAAAAAA 3
```

XX	RESULT 220
ID	ADQ77961 standard; DNA; 25 BP.
AC	ADQ77961;
XX	
DT	09-SEP-2004 (first entry)
XX	
DB	PCR primer amplifies promoter Cpg islands of cancer related genes Seg643.
XX	
KW	mini-sequencing; Cpg island; methylation specific PCR; MSP;
KV	multiplex MSP PCR; cancer; PCR; primer; ss; microarray chip.
XX	
OS	Unidentified.
XX	
PN	KR2003069752-A.
PD	
XX	
PF	27-AUG-2003.
PR	07-MAY-2002; 2002KR-00025108.
PA	20-FEB-2002; 2002KR-00009132.
PI	(GOOD-) GOODGENE INC.
DR	
XX	
PT	Choi HI, Eom TH, Jun BI, Kim OH, Mun UC, Oh MY, Song MG;
PS	WPI; 2004-095256/10.
XX	
CC	Multisequencing type oligonucleotide chip for detecting methylation of
CC	promoter CpG islands of multiple genes, useful for detecting cancer.
XX	
PS	Claim 1; SEQ ID NO 643; 248bp; Korean.
XX	
CC	This invention relates to a novel mini-sequencing type DNA
CC	oligonucleotide chip. Specifically, it refers to a chip that is useful
CC	for detecting methylation of promoter CpG islands occurring in multiple
CC	genes. The present invention describes using oligonucleotide primers to
CC	determine the position of a target gene and promoter CpG islands, this
CC	constitutes creating DNA of the target gene with sodium bisulfite in
CC	order to carry out methylation specific (MSP) PCR or multiplex MSP PCR to
CC	amplify the sodium bisulfite treated DNA and sequencing the PCR product
CC	to confirm the hypomethylation site of the promoter CpG islands of
CC	multiple genes. Accordingly, the chip comprises primer sequences designed
CC	from these PCR products that have amine linkers of 12 carbons attached to
CC	the 5'-terminal, which are spotted onto the glass slide coated with 3-
CC	aminopropyltrimethoxysilan and 1,4-diisothiocyanate using an array robot.
CC	The resulting minisequencing chip is useful for detecting cancer, thereby
CC	accurately and rapidly detecting methylation of CpG islands of multiple
CC	genes. This oligonucleotide sequence is a PCR primer used on the biochip,
CC	given in an exemplification of the invention.
XX	
SQ	Sequence 25 BP; 18 A; 4 C; 0 G; 3 T; 0 U; 0 Other;
Query Match	0.3%; Score 18.2; DB 1; Length 25;
Best Local Similarity	87.0%; Pred. No. 3.7e+02;
Matches 20; Conservative	0; Mismatches 3; Indels 0; Gaps 0;
OY	5389 AATTAAAAAATACAAAAGAA 5411
DB	2 ACTTAAAAAAATAAAAAACAA 24
RESULT 221	
ID	ADQ77891 standard; DNA; 25 BP.
AC	ADQ77891;
XX	
DT	09-SEP-2004 (first entry)
XX	
PC	PCR primer amplifies promoter CpG islands of cancer related genes Seg573.

KW	mini-sequencing; CpG island; methylation specific PCR; MSP;	
KW	multiplex MSP PCR; cancer; PCR; primer; ss; microarray chip.	
XX	Unidentified.	
OS		
XX		
PN	KR2003069752-A.	
PD	27-AUG-2003.	
XX		
PP	07-MAY-2002; 2002KR-00025108.	
XX		
PR	20-FEB-2002; 2002KR-00009132.	
PA	(GOOD-) GOODGENE INC.	
XX		
PI	Choi HI, Bom TH, Jun BI, Kim OH, Mun UC, Oh MY, Song MG;	
XX		
DR	WPI; 2004-095256/10.	
XX		
PT	Minisequencing type oligonucleotide chip for detecting methylation of	
XX	promoter CpG islands of multiple genes, useful for detecting cancer.	
XX		
PS	Claim 1; SEQ ID NO 573; 248bp; Korean.	
XX		
CC	This invention relates to a novel mini-sequencing type DNA	
CC	oligonucleotide chip. Specifically, it refers to a chip that is useful	
CC	for detecting methylation of promoter CpG islands occurring in multiple	
CC	genes. The present invention describes using oligonucleotide primers to	
CC	determine the position of a target gene and promoter CpG islands, this	
CC	constitutes treating DNA of the target gene with sodium bisulfite in	
CC	order to carry out methylation specific (MSP) PCR or multiplex MSP PCR to	
CC	amplify the sodium bisulfite treated DNA and sequencing the PCR product	
CC	to confirm the hypomethylation site of the promoter CpG islands of	
CC	multiple genes. Accordingly, the chip comprises primer sequences designed	
CC	from these PCR products that have anne linkers of 12 carbons attached to	
CC	the 5'-terminal, which are spotted onto the glass slide coated with 3-	
CC	aminopropyltrimethoxysilan and 1,4-diisocyanate using an array robot.	
CC	The resulting minisequencing chip is useful for detecting cancer, thereby	
CC	accurately and rapidly detecting methylation of CpG islands of multiple	
CC	genes. This oligonucleotide sequence is a PCR primer used on the biochip,	
XX	given in an exemplification of the invention.	
XX		
SQ	Sequence 25 BP; 18 A; 4 C; 0 G; 3 T; 0 U; 0 Other;	
	Query Match 0.3%; Score 18.2; DB 1; Length 25;	
	Best Local Similarity 87.0%; Pred. No. 3.7e+02;	
	Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;	
QY	5389 AATTAAAAAATACAAAAAGAA 5411	
DB	2 ACTTAAAAAATATAAAAAACA 24	
	RESULT 222	
ID	AAAT0276/C	
XX	AAAT0276 standard; DNA; 26 BP.	
AC	AAAT0276;	
XX		
DT	03-OCT-2002 (revised)	
XX	26-MAY-1991 (first entry)	
DE	Sequence of sclasile link probe MRC060 (HL).	
XX		
KW	Hybridisation; probe; ss.	
XX		
OS	Synthetic.	
XX		
PN	EP227976-A.	
XX		
PD	08-JUL-1987.	
XX		
PF	04-DEC-1986; 86EP-00116906.	

```

XX 05-DEC-1985; 85US-00805279.
XX
XX (MEIO-) MEIOGENICS INC.
XX
XX Duck P, Bender R, Crosby W, Robertson JG;
XX
XX WPI; 1987-186567/27.
XX
XX Synthetic nucleic acid probes - comprising two nucleic acid sequences
XX linked by a scissile linkage.
XX
XX Example; p29; 46pp; English.
XX
XX The patent claims a new molecule of formula (NA1----S----NA2)n. NA1 and
XX NA2 are noncomplementary nucleic acid sequences; --S-- = a scissile
XX linkage; n = 1 or 1,000, which is used for the detection of specific DNA
XX or RNA sequences in a test soln. The scissile link probes may be PL
XX (Permanent linkage to Solid Support) or HL (Hydrolysable Linkage to Solid
XX Support). The differential liability of DNA and RNA may be exploited in a
XX heterogeneous system when the scissile linkage is an RNA molecule. In the
XX examples, counter probe molecules 9 through 16 were used to determine
XX suitable hybridisation conditions. (Updated on 03-OCT-2002 to add missing
XX OS field.)
XX
SQ Sequence 26 BP; 0 A; 0 C; 0 G; 22 T; 4 U; 0 Other;
Query Match 0.3%; Score 18.2; DB 1; Length 26;
Best Local Similarity 87.0%; Pred. No. 3.7e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAATACAAAAAGAAAAA 5415
Db 26 AAAAAAAAAAAAAAAAAAAAAA 4
RESULT 223
AAN70275/c
ID AAN70275 standard; DNA; 26 BP.
XX
XX AAN70275;
XX
XX 03-OCT-2002 (revised)
XX 26-MAY-1991 (first entry)
XX
XX DE Sequence of scissile link probe MRC059 (HL).
XX
XX Hybridisation; probe; ss.
XX
XX Synthetic.
XX
XX OS BP227976-A.
XX
XX PN BP227976-A.
XX
XX PD 08-JUL-1987.
XX
XX PF 04-DEC-1986; 86EP-00116906.
XX
XX PR 05-DEC-1985; 85US-00805279.
XX
XX PA (MEIO-) MEIOGENICS INC.
XX
XX PI Duck P, Bender R, Crosby W, Robertson JG;
XX
XX WPI; 1987-186567/27.
XX
XX Synthetic nucleic acid probes - comprising two nucleic acid sequences
XX linked by a scissile linkage.
XX
XX Example; p29; 46pp; English.
XX
XX The patent claims a new molecule of formula (NA1----S----NA2)n. NA1 and
XX NA2 are noncomplementary nucleic acid sequences; --S-- = a scissile
XX linkage; n = 1 or 1,000, which is used for the detection of specific DNA
XX

```

CC	or RNA sequences in a test soln. The scissile link probes may be PL
CC	(Permanent linkage to Solid Support) or HL (Hydrolysable linkage to Solid
CC	Support). The differential liability of DNA and RNA may be exploited in a
CC	heterogenous system when the scissile linkage is an RNA molecule. In the
CC	examples, counter probe molecules 9 through 16 were used to determine
CC	suitable hybridisation conditions. (Updated on 03-OCT-2002 to add missing
CC	OS field.)
CC	
XX	
XX	Sequence 26 BP; 0 A; 0 C; 0 G; 22 T; 4 U; 0 Other;
SO	
	Query Match 0.3%; Score 18.2; DB 1; Length 26;
	Best Local Similarity 87.0%; Pred.No. 3.7e+02;
	Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0
OY	5393 AAAAAAAAAATCAAAAAAAAAAGAAAAA 5415
Db	26 AAAAAAAAAAAAAAAAAAAAAAAAAAAAA 4
RESULT 224	
AAAN92241/C	
ID	AAAN92241 standard; DNA; 26 BP.
XX	
AC	AAAN92241;
XX	
DT	25-MAR-2003 (revised)
DT	31-OCT-2002 (revised)
DT	25-APR-1990 (first entry)
XX	
DE	SS probe MRCO59.
XX	
KM	Probe MRCO59; solid support; ribonuclease.
XX	
OS	Synthetic.
XX	
FT	Key
FT	Location/Qualifiers
FT	1..10
FT	/*tag= a
FT	/note= "deoxyribonucleotides."
FT	11..14
FT	/*tag= b
FT	/note= "ribonucleotides."
FT	15..26
FT	/*tag= C
FT	/note= "deoxyribonucleotides."
PN	W08910415-A.
XX	
PD	02-NOV-1989.
XX	
PP	29-APR-1988; 88US-00187814.
XX	
PR	29-APR-1988; 88US-00187814.
XX	
PA	(MEIO-) MEIOGENICS INC.
XX	
PI	Duck P, Bender R;
XX	
DR	WPI; 1989-339977/46.
XX	
FT	Detecting target nucleic acid molecules - using excess complementary
XX	nucleic acid probes and nicking to complete a cycling sequence.
XX	
PS	Disclosure; Page 24; 34pp; English.
XX	
CC	Probe MRCO59 is bound by a hydrolysable linkage to a solid support at its
CC	3' end. It is used by reacting excess probe with a target nucleic acid;
CC	nicking hybridised probe at least once within a predetermined sequence to
CC	form 2 or more probe fragments hybridised to the target sequence, which
CC	results in the probe fragments becoming hybridised to another probe; and
CC	identifying probe fragments, so detecting the target sequence. The probe
CC	can react with target sequence to complete a cycling sequence. Using this
CC	system, sensitivity of 10 exp. -19 to 10 exp. -20 molecules of target can

CC be obtd. The probe is cleavable at the ribonucleotides by a de RNase, eg
 CC RNase H or ExoIII. (Updated on 31-OCT-2002 to add missing OS field.)
 CC (Updated on 25-MAR-2003 to correct PR field.)
 XX

SQ Sequence 26 BP; 0 A; 0 C; 0 G; 22 T; 4 U; 0 Other;

Query Match 0.3%; Score 18.2; DB 1; Length 26;

Best Local Similarity 87.0%; Pred. No. 3.7e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415

Db 26 AAAAAAAAAAAAAAAAAAAAAA 4

RESULT 225
 ID AAN92242/c
 XX AAN92242 standard; DNA; 26 BP.

AC AAN92242;

XX 25-MAR-2003 (revised)

DT 31-OCT-2002 (revised)

DT 25-APR-1990 (first entry)

XX SS probe MRCO60.

XX Probe MRCO60; solid support; ribonuclease.

XX Synthetic.

FT Key Location/Qualifiers

FT misc_feature 1..12

FT /tag= a

FT /note= "deoxyribonucleotides."

FT /tag= b

FT /note= "ribonucleotides."

FT /tag= c

FT /note= "deoxyribonucleotides."

XX MO8910415-A.

XX 02-NOV-1989.

XX 29-APR-1988; 88US-00187814.

XX 29-APR-1988; 88US-00187814.

XX (MEIO-) MEIOGENICS INC.

XX Duck P, Bender R;

XX WPI; 1989-339977/46.

XX Detecting target nucleic acid molecules - using excess complementary

XX nucleic acid probes and nicking to complete a cycling sequence.

XX Disclosure; Page 24; 34pp; English.

XX Probe MRCO60 is bound by a hydrolysable linkage to a solid support at its

XX 3' end. It is used by reacting excess probe with a target nucleic acid;

XX nicking hybridised probe at least once within a predetermined sequence to

XX form 2 or more probe fragments hybridised to the target sequence, which

XX results in the probe fragments becoming hybridised to another probe; and

XX identifying probe fragments, so detecting the target sequence. The probe

XX can react with target sequence to complete a cycling sequence. Using this

XX system, sensitivity of 10 exp. -19 to 10 exp. -20 molecules of target can

XX be obtd. The probe is cleavable at the ribonucleotides by a de RNase, eg

XX RNase H or ExoIII. (Updated on 31-OCT-2002 to add missing OS field.)

XX (Updated on 25-MAR-2003 to correct PR field.)

SQ Sequence 26 BP; 0 A; 0 C; 0 G; 22 T; 4 U; 0 Other;

Query Match 0.3%; Score 18.2; DB 1; Length 26;

Best Local Similarity 87.0%; Pred. No. 3.7e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415

Db 26 AAAAAAAAAAAAAAAAAAAAAA 4

RESULT 226
 ID AAT93819/c
 XX AAT93819 standard; DNA; 26 BP.

AC AAT93819;

XX 25-MAR-2003 (revised)

DT 24-FEB-1998 (first entry)

XX Antitumoural phosphodiester oligonucleotide 9 with cytotoxic activity.

XX Phosphodiester; selective binding; cell viability; growth;

XX tumoural cell line; cytotoxic activity; tumour cell; lymphoma;

XX Lymphoblastic tumour; ss.

XX Synthetic.

FT Key Location/Qualifiers

FT modified_base 1..26

FT /tag= a

FT /note= "phosphodiester oligonucleotide"

XX WO9720924-A1.

XX 12-JUN-1997.

XX 04-DEC-1996; 96MO-EP005388.

XX 04-DEC-1995; 95IT-MI002539.

XX (SAIC-) SAICOM SRL.

XX Scagliante B, Quadrifoglio F;

XX WPI; 1997-319771/29.

XX New phosphodiesteric oligonucleotide(s) - which exert a specific and

XX selective cytotoxic effect on tumour cells, for treating both solid and

XX liquid tumours.

XX Claim 10; Page 5; 38pp; English.

XX Novel phosphodiesteric oligonucleotides AAT93811-27 are based on the

XX generic formula, in the 3'-5' or 5'-3' direction: (GaTa')a''-(Gtb'b')b''-

XX (Gctc')c''-(Gdtd')d''-(Gefe')e''-(Gftr')f''-(GgTg')g''-N', where: N and

XX N' = T or G, equal or different from each other; x = 0-8, equal or

XX different from each other; a, b, c, d, e, f, and g = 0-10, equal or

XX different from each other; a', b', c', d', e', f', and g' = 0-30, equal

XX or different from each other; a'', b'', c'', d'', e'', f'', and g'' = 1-

XX 16, equal or different from each other; The oligonucleotides are believed

XX to selectively bind and sequester some proteins which are essential to

XX the viability and growth of tumoural cell line. They have specific and

XX selective cytotoxic activity against tumour cells, and can be used for

XX treating tumours of the liquid type, in particular of lymphoblastic

XX origin, and of solid type, in particular of lymphomas. The present

XX phosphodiester oligonucleotide, at a concentration of 15 micromolar,

XX reduced growth of CCR-CGM tumoural cells by 76%, which is detectable 48

XX hours after administration. (Updated on 25-MAR-2003 to correct PR field.)

XX Sequence 26 BP; 0 A; 0 C; 2 G; 24 T; 0 U; 0 Other;

XX Query Match 0.3%; Score 18.2; DB 1; Length 26;

Best Local Similarity 87.0%; Pred. No. 3.7e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
Db 25 AAAAAAAAAACAAAAAGAAAAA 3

RESULT 227
AAx07466/c
ID AAX07466 standard; cDNA; 26 BP.

AC AAX07466;

DT 08-JUN-1999 (first entry)

DE Human BS124 specific EST clone oligonucleotide.

KW BS124; breast; cancer; detection; diagnosis; prevention; treatment; EST;
88.

OS Synthetic.

PN WO9659049-A1.

PD 30-DEC-1998.

PF 19-JUN-1998; 98WO-US012862.

PR 20-JUN-1997; 97US-00879354.

PA (ABBO) ABBOTT LAB.

PI Billing-Medel PA, Cohen M, Colpitts TL, Friedman PN, Gordon J;

PI Granados EN, Hodges SC, Klasse MR, Kratochvil JD, Russell JC;

PI Scheffel CP, Stroupe SD, Yu H;

DR WPI; 1999-105623/09.

PT New isolated BS124 polynucleotides and polypeptides - used for detecting,
diagnosing, preventing or treating diseases or conditions of the breast,
such as breast cancer.

PS Disclosure; Page 97; 125pp; English.

CC The sequence is that of an oligonucleotide used in the isolation of a

CC BS124-specific EST clone. It is useful for detecting, diagnosing,
staging, preventing or treating, or determining predisposition to

CC diseases or conditions of the breast, such as breast cancer

SQ Sequence 26 BP; 0 A; 0 C; 1 G; 25 T; 0 U; 0 Other;

Query Match 0.3%; Score 18.2; DB 1; Length 26;
Best Local Similarity 87.0%; Pred. No. 3.7e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
Db 25 AAAAAAAAAACAAAAAGAAAAA 3

RESULT 228
AAx78723/c
ID AAX78723 standard; DNA; 26 BP.

AC AAX78723;

DT 03-SEP-1999 (first entry)

DE Human pancreatic PA153 EST-specific clone primer 12.

KW Pancreatic disease; PA153; human; cytostatic; detection; antigen;
anti-PA153; antagonist; therapy; treatment; tumour; metastasis;

KW gene therapy; EST; expressed sequence tag; primer; 88.

OS Synthetic.

OS Homo sapiens.

PN WO9931274-A2.

PD 24-JUN-1999.

PF 11-DEC-1998; 98WO-US026441.

PR 15-DEC-1997; 97US-00990568.

PA (ABBO) ABBOTT LAB.

PI Billing-Medel PA, Cohen M, Colpitts TL, Friedman PN, Gordon J;

PI Granados EN, Hodges SC, Klasse MR, Kratochvil JD, Roberts-Rapp L;

PI Russell JC, Stroupe SD;

DR WPI; 1999-405041/34.

PT PA153 cDNA transcribed from pancreatic tissue.

PS Example 2; Page 121; 123pp; English.

CC This invention describes novel contiguous and partially overlapping cDNA

CC sequences and their encoded polypeptides, designated PA153, transcribed

CC from human pancreatic tissue and which have cytostatic activity. The

CC PA153 polynucleotides, proteins and antibodies are all useful in methods

CC of detection. Detection of PA153 polynucleotide, antigens or anti-PA153

CC antibodies in a sample is indicative of pancreatic disease. PA153

CC antibodies (antagonists) can also be used in vivo for therapeutic use,

CC e.g. treatment of pancreatic disease, tumours or metastases. Antisense

CC PA153 polynucleotides can be used in gene therapy of pancreatic diseases.

CC AAX78712-X78725 represent primers used in the method of the invention

SQ Sequence 26 BP; 0 A; 0 C; 1 G; 25 T; 0 U; 0 Other;

Query Match 0.3%; Score 18.2; DB 1; Length 26;
Best Local Similarity 87.0%; Pred. No. 3.7e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
Db 25 AAAAAAAAAACAAAAAGAAAAA 3

RESULT 229
AAf77536/c
ID AAF77536 standard; DNA; 26 BP.

AC AAF77536;

DT 23-MAY-2001 (first entry)

DE cDNA library production method related oligonucleotide SEQ ID NO: 5.

KW cDNA library production; SCUA; gene chip technology;

KW differential screening; pathological diagnosis; genetic identification;

KW single-cell cDNA library amplification; ds.
Synthetic.
US6197554-B1.
06-MAR-2001.
20-NOV-1998; 98US-00197951.
20-NOV-1998; 98US-00197951.
(LINS/) LIN S.
(CHUD/) CHUDONG C.

PA (YING/) YING S.
 XX
 PI Lin S, Chuong C, Ying S;
 XX
 DR WPI; 2001-243448/25.
 XX
 PT Generating a complete full-length cDNA library from single cells for use
 PT in gene chip technology, involves reverse transcribing intracellular
 PT mRNAs, adding polynucleotide tail and amplifying formed cDNAs.
 XX
 PS Disclosure; Col 11-12; 11pp; English.
 XX
 CC The present invention describes a method of producing full-length cDNA
 CC libraries from single cells, designated single-cell cDNA library
 CC amplification (SCA). The method is useful in gene chip technology,
 CC differential screening, pathological diagnosis, physiological prognosis
 CC and genetic identification. No further information about this sequence is
 CC given in the specification
 XX
 SO Sequence 26 BP; 0 A; 0 C; 0 G; 26 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 18.2; DB 1; Length 26;
 Best Local Similarity 87.0%; Pred. No. 3.7e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
 DB 26 AAAAAAAAAAAAAAAAAAAAAA 4
 XX
 RESULT 230
 AAF23526/C
 ID AAF23526 standard; DNA; 26 BP.
 AC AAF23526;
 XX
 DT 22-MAR-2001 (first entry)
 XX
 DE Primer #4.
 XX
 KW Primer; mRNA; amplification; ss.
 XX
 OS Unidentified.
 XX
 PN WO200075356-A1.
 XX
 PD 14-DEC-2000.
 XX
 PF 04-JUN-1999; 99MO-US012461.
 XX
 PR 04-JUN-1999; 99MO-US012461.
 XX
 PA (LINS/) LIN S.
 PA (YING/) YING S.
 PA (CHUO/) CHUONG C.
 PA (WIDE/) WIDELITZ R B.
 XX
 PI Lin S, Ying S, Chuong C, Widelitz RB;
 XX
 DR WPI; 2001-061734/07.
 XX
 PT Generating amplified messenger RNA sequences from single cells, involves
 PT cycling steps of reverse transcription, denaturation, double-stranded DNA
 PT sequences and in vitro transcription.
 XX
 PS Disclosure; Page 17; 31pp; English.
 XX
 CC The present invention relates to generating amplified messenger RNAs with
 CC polymerase reaction activity, comprising cycling steps of reverse
 CC transcription, denaturation, double-stranded cDNA synthesis and in vitro
 CC transcription. The invention is used for generating amplified mRNAs from
 CC limited mRNAs from single cells

SO Sequence 26 BP; 0 A; 0 C; 0 G; 26 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 18.2; DB 1; Length 26;
 Best Local Similarity 87.0%; Pred. No. 3.7e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
 DB 26 AAAAAAAAAAAAAAAAAAAAAA 4
 XX
 RESULT 231
 AAI73048/C
 ID AAI73048 standard; DNA; 26 BP.
 AC AAI73048;
 XX
 DT 24-OCT-2002 (first entry)
 XX
 DE Scaffold oligonucleotide.
 XX
 KW Molecular scaffold; fluorophore; fluorescence; energy transfer;
 KW emission wavelength; excitation wavelength; multiple; single nucleotide;
 KW polymorphism; ss.
 XX
 OS Synthetic.
 XX
 PN WO200222883-A1.
 XX
 PD 21-MAR-2002.
 XX
 PF 11-SEP-2001; 2001WO-US028967.
 XX
 PR 11-SEP-2000; 2000US-00658077.
 PR 31-JUL-2001; 2001US-0309156P.
 XX
 PA (UYCO) UNIV COLUMBIA NEW YORK.
 XX
 PI Ju J, Li Z, Tong A, Rusbo JJ;
 XX
 DR WPI; 2002-575158/61.
 XX
 PT Composition of matter useful for multi-component analyses, comprises
 PT multiple fluorophores bound to molecular scaffold at preset positions to
 PT permit fluorescence energy transfer between two fluorophores.
 XX
 PS Disclosure; Page 43; 113pp; English.
 XX
 CC This sequence represents a molecular scaffold which may be used in a
 CC composition of matter comprising multiple fluorophores. The fluorophores
 CC are bound to the molecular scaffold at separate predetermined positions,
 CC to permit fluorescence energy transfer between two fluorophores. The
 CC fluorophores are characterized by maximum emission wavelength of one
 CC being greater than the minimum excitation wavelength of the other. The
 CC composition is useful for determining whether a preselected nucleotide
 CC residue is present at a predetermined position within a nucleic acid. It
 CC is also useful in multicomponent analysis including multiplex biological
 CC analysis, and identifying multiple single nucleotide polymorphisms. The
 CC presence of a number of given nucleotide residues is determined
 CC simultaneously by the composition of the invention
 XX
 SO Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 18.2; DB 1; Length 26;
 Best Local Similarity 87.0%; Pred. No. 3.7e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
 DB 25 AAAAAAAAAAAAAAAAAAAAAA 3
 XX
 RESULT 232

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AAS20672/c
ID AAS20672 standard; DNA; 26 BP.
XX
AC AAS20672;
XX
DT 09-APR-2002 (first entry)
XX
DE Human zalphall ligand sequencing primer ZC764b.
XX
XX Cytokine; zalphall ligand; zalphall receptor; NK cell progenitor;
KW natural killer cell proliferation; T-cell proliferation;
KW B-cell proliferation; anti-tumour response; immune system;
KW immunostimulant; cytostatic; human; sequencing primer; ss.
XX
OS Homo sapiens.
XX
XX US6307024-B1.
XX
XX 23-OCT-2001.
XX
XX 09-MAR-2000; 2000US-00522217.
XX
XX 09-MAR-1999; 99US-0123547P.
XX 11-MAR-1999; 99US-0123804P.
XX 01-JUL-1999; 99US-0142013P.
XX
XX (ZYMO ) ZYMOGENETICS INC.
XX
PI Novak JR, Prenell SR, Sprecher CA, Foster DC, Holly RD;
PI Gross JM, Johnston UV, Nelson AJ, Dillon SR, Hammond AK;
XX
XX WPI; 2002-040208/05.
XX
XX New zalphall ligand polypeptides and polynucleotides, useful for
PT stimulating proliferation, activation, differentiation and/or induction
PT of inhibition of specialized cell function, or for stimulating an
PT antigenic response.
XX
XX Example 7; Col 139; 105pp; English.
XX
XX The present invention relates to the isolation of a novel cytokine,
XX zalphall ligand and the polynucleotide encoding it. The invention also
XX gives the sequence for the zalphall receptor and the polynucleotide
XX encoding it. The zalphall ligand polypeptide stimulates proliferation of
XX natural killer (NK) cells or NK cell progenitors, the activation of NK
XX cells, proliferation of T-cells, proliferation of B-cells stimulated with
XX anti-CD40 antibodies, stimulates an antigenic response in a mammal, and
XX reduces proliferation of B-cells stimulated with anti-IGM antibodies. The
XX zalphall ligand polypeptide is also useful in preparing antibodies that
XX bind to zalphall ligand epitopes. The zalphall ligand polynucleotides can
XX be used as probes or primers to clone regions of a zalphall ligand gene,
XX and in gene therapy. Zalphall ligand may also be used to identify
XX inhibitors of its activity, to enhance the generation of anti-tumour
XX responses with or without the infusion of donor lymphocytes, and to
XX activate or stimulate the immune system. The present sequence represents
XX a sequencing primer used to sequence CDNA clones in the isolation of
XX human zalphall ligand
XX
SQ Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 18.2; DB 1; Length 26;
Best Local Similarity 87.0%; Pred. No. 3.7e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
DB 25 AAAAAAAAAAAAAAAAAAAAAA 3
XX
RESULT 233
AAD43853/c
ID AAD43853 standard; DNA; 26 BP.
XX
```

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AC AAD43853;
XX
XX 14-NOV-2002 (first entry)
XX
XX Primer #2 used to illustrate the method of the invention.
XX
XX Single stranded polynucleotide tag; cleavage agent; gene expression;
KW primer; ss.
XX
XX Unidentified.
XX
XX MO200259357-A2.
XX
XX 01-AUG-2002.
XX
XX 24-JAN-2002; 2002WO-DK000052.
XX
XX 24-JUN-2001; 2001DK-00000126.
XX 12-FEB-2001; 2001US-0267704P.
XX
XX (GENO-) GENOMIC EXPRESSION APS.
XX
XX Pedersen ML;
XX
XX WPI; 2002-636542/68.
XX
XX Example; Page 294; 302pp; English.
XX
XX The invention relates to a method for obtaining a single stranded
XX polynucleotide tag from a biological sample by cleaving one of the
XX complementary strands of a double stranded polynucleotide with a cleavage
XX agent capable of recognising a double stranded polynucleotide comprising
XX complementary strands and cleaving only one of the strands of the
XX polynucleotide in the process of generating a single stranded
XX polynucleotide tag. The method is useful for separating, analysing,
XX quantifying or obtaining single stranded polynucleotides comprising tags
XX originating partly, and preferably wholly from a source of DNA and/or RNA
XX in a sample comprising biological cells. The method is particularly for
XX analysing gene expression (expression profiling or differential gene
XX expression), or in diagnosing clinical conditions. The present sequence
XX is a primer used in the exemplification of the invention
XX
SQ Sequence 26 BP; 0 A; 0 C; 0 G; 26 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 18.2; DB 1; Length 26;
Best Local Similarity 87.0%; Pred. No. 3.7e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
DB 26 AAAAAAAAAAAAAAAAAAAAAA 4
XX
RESULT 234
ABX93461/c
ID ABX93461 standard; DNA; 26 BP.
XX
XX ABX93461;
XX
XX 27-MAY-2003 (first entry)
XX
XX LSI47-specific polynucleotide sequencing related universal primer #1.
XX
XX LSI47; cancer; lung cancer; gene therapy; cytostatic; ss; sequencing;
KW primer; EST clone; expressed sequence tag clone.
XX
XX Synthetic.
XX
XX
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PN US2002188114-A1.
XX
XX 12-DEC-2002.
XX
XX 05-JUN-1998; 98US-00092296.
XX
XX 05-JUN-1997; 97US-0048810P.
XX
PA (BILL/) BILLINGEL P.
PA (COHE/) COHEN M.
PA (COLP/) COLPITTS T L.
PA (FRIB/) FRIEDMAN P N.
PA (KLAS/) KLAS M R.
PA (RUSSE/) RUSSELL J C.
PA (STROU/) STROUPE S.
XX
PI Billengel P, Cohen M, Colpitts TL, Friedman PN, Kلاس MR;
PI Russell JC, Stroupe S;
XX
XX WPI; 2003-341045/32.
XX
XX New LS147 polypeptide, useful for preparing a composition for treating
XX e.g., lung cancer.
XX
XX Example 2; Page 39; 47p; English.
XX
XX The invention describes a purified polypeptide or its fragment derived
XX from the LS147 gene capable of selectively hybridizing to the nucleic
XX acid of the gene and has at least 50% identity with the polynucleotide.
XX The LS147 polypeptide is useful for preparing a composition for treating
XX cancer, e.g., lung cancer using gene therapy. This sequence represents a
XX universal primer used to sequence LS147 expressed sequence tag (EST) -
XX clones
XX
XX Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;
XX
QY Query Match 0.3%; Score 18.2; DB 1; Length 26;
Best Local Similarity 87.0%; Pred. No. 3.7e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
DB 5393 AAAAAAAAAACAAAGAAAAA 5415
25 AAAAAAAAAAAAAAAAAAAAAA 3
XX
RESULT 235
AB224784/c
ID AB224784 standard; DNA; 26 BP.
XX
AC AB224784;
XX
DT 07-APR-2003 (first entry)
XX
DE Oligodeoxynucleic acid molecule ODN 24.
XX
DE Immunostimulant; oligodeoxynucleic acid; ODN; vaccine; DNA-RNA hybrid;
XX ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..26
FT /tag= a
FT /mod_base= OTHER
FT /note= "Chliphosphate backbone"
XX
PN WO200295027-A2.
XX
XX 28-NOV-2002.
XX
XX 17-MAY-2002; 2002WO-EP005448.
XX
XX 21-MAY-2001; 2001AT-00000805.
XX
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XX
XX (INTE-) INTERCELL BIOMEDIZINISCHE FORSCHUNGS.
PA (CIST-) CISTEM BIOTECHNOLOGIES GMBH.
XX
XX Lingnan K, Schellack C, Schmidt W;
XX
XX WPI; 2003-183880/18.
XX
XX New oligodeoxynucleic acid molecules useful for the preparation of
XX vaccine.
XX
XX Example 8; Page 32; 57p; English.
XX
XX The present sequence is that of a thiosubstituted oligodeoxynucleic acid
XX (ODN) molecule, ODN 24, including deoxyuridine monophosphates. The
XX invention is based on the discovery that ODNs containing deoxyuridine
XX residues (U-ODNs) have an immunostimulatory effect comparable to, or in
XX many instances greater than, ODNs containing CpG motifs, producing higher
XX numbers of specific T cells to a given antigen. The U-ODNs do not induce
XX the systemic production of pro-inflammatory cytokines and, in contrast to
XX CpG ODNs, are not dependent on a specific motif or a palindromic
XX sequence. Use of a U-ODN for the preparation of a vaccine is claimed.
XX Combining the U-ODN with an antigen strongly increases the potential of
XX the antigen to raise the protection/immune response of a vaccinated
XX individual. An example of the invention demonstrated the generation of a
XX specific immune response against a melanoma-derived peptide (see
XX ABP58360) by injection of mice with the peptide in combination with ODN
XX 24
XX
XX Sequence 26 BP; 0 A; 0 C; 0 G; 1 T; 25 U; 0 Other;
XX
QY Query Match 0.3%; Score 18.2; DB 1; Length 26;
Best Local Similarity 87.0%; Pred. No. 3.7e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
DB 5393 AAAAAAAAAACAAAGAAAAA 5415
26 AAAAAAAAAAAAAAAAAAAAAA 4
XX
RESULT 236
ACA62282/c
ID ACA62282 standard; DNA; 26 BP.
XX
AC ACA62282;
XX
DT 12-AUG-2003 (first entry)
XX
DE Oligo (dT) primer #1.
XX
DE ss; PCR; primer; antisense therapy; mRNA expression profile;
XX promoter containing primer.
XX
OS Synthetic.
XX
PN US2003022318-A1.
XX
XX 30-JAN-2003.
XX
XX 07-SEP-2001; 2001US-00949305.
XX
XX 25-JAN-2000; 2000US-00494212.
XX
XX (EPIC-) EPICLONS INC.
XX
XX Lin S, Ying S;
XX
XX WPI; 2003-479488/45.
XX
XX Improved polymerase thermocycling reaction for nucleic acid
XX amplification, by thermal cycling of promoter-linked nucleic acid
XX template synthesis and in vitro transcriptional amplification of nucleic
XX acid sequences.
XX
PT
```

XX Example 4; Page 14; 28pp; English.

PS The invention relates to an improved polymerase thermocycling reaction
XX (M1) for linear amplification of nucleic acid sequences, involves
CC denaturing a number of nucleic acid templates (I1), combining the
CC denatured (I1) with a promoter-containing primer (P1), a primer (P2), a
CC number of deoxynucleotide triphosphates and ribonucleotide triphosphates,
CC a reverse transcription enzyme, a DNA-dependent DNA polymerase and RNA
CC polymerase, contacting P1 with (I1) to generate a number of promoter-
CC containing templates, denaturing the promoter-containing templates,
CC contacting P2 with the denatured promoter-containing templates to
CC generate a number of promoter-containing double-stranded DNA templates,
CC where the double-stranded nucleic acid templates are flanked by P1 in one
CC end and P2 in the other end of the other orientation, transcribing the
CC promoter-containing double-stranded DNA templates to form a number of
CC amplified RNA sequences, including the primer region of the promoter-
CC containing double-stranded DNA templates, contacting the amplified RNA
CC sequences with P2 to form a number of cDNAs and a number of DNA-RNA
CC hybrid templates, and denaturing the DNA-RNA hybrid templates. The method
CC is useful for improved polymerase thermocycling reaction for linear
CC amplification of nucleic acid sequences, and thus for producing RNA
CC expression profile of a cell by M1 to generate multiple copies of the
CC mRNA. M1 is also useful for determining aberrant protein production of
CC cells in a diseased state, by generating an expression profile by the
CC above method, of cells in both normal and diseased states, comparing the
CC expression profile of the cells in the normal and diseased states,
CC determining the differences in mRNA composition of the cell(s) in the
CC diseased state, isolating the mRNA sequences of cell(s) in the diseased
CC state that differ from mRNA in cell(s) in non-diseased state, amplifying
CC the isolated mRNA by M1, and determining aberrant protein function of the
CC protein coded for by the isolated mRNA. M1 is also useful for treating a
CC cell in a diseased state caused by aberrant protein production, by
CC determining protein expression of a cell in a diseased state, determining
CC the mRNA sequence for the aberrant proteins, synthesising an antisense
CC sequence of the mRNA, amplifying the antisense mRNA sequences by M1, and
CC delivering a pharmaceutically effective dosage of a composition
CC comprising the anti-sense mRNA and a compatible lipid based biological
CC carrier. M1 is also useful for predicting the efficacy of a proposed drug
CC targeted against an aberrant protein, by determining aberrant protein
CC production of cell in a diseased state by the above method, amplifying
CC the aberrant protein by M1 and using recombinant techniques to determine
CC the effect of proposed drug on the aberrant protein. M1 is also useful
CC for differential screening of tissue-specific gene expression at a
CC cellular level, for preparing labeled RNA/DNA probes for a gene chip
CC technology, and for determining the efficacy of a drug regimen against a
CC gene or its cDNAs. The present sequence is an Oligo (dT) primer used to
CC produce second strand cDNA in the method of the invention
XX

XX Sequence 26 BP; 0 A; 0 C; 0 G; 26 T; 0 U; 0 Other;

XX Query Match 0.3%; Score 18.2; DB 1; Length 26;
XX Best Local Similarity 87.0%; Pred. No. 3.7e+02;
XX Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAATCAAAAAAAAAAGAAAAA 5415

DB 26 AAAAAAAAAAAAAAAAAAAAAAAAAAAAA 4

XX RESULT 237
XX ADH44609/c
XX ID ADH44609 standard; DNA; 26 BP.

XX ADH44609;

XX 25-MAR-2004 (first entry)

XX Human cDNA encoding zalphall1 sequencing primer #3.

XX Human; ss; zalphall1 ligand; zalphall1 receptor; immune response;
XX tumour progression; metastasis; tumour stasis; haematopoietic tumour;
XX lymphoma; B cell tumour; systemic lupus erythematosus;

KW rheumatoid arthritis; myasthenia gravis; diabetes; infectious disease;
KW immunocompromised patient; HIV infection; vaccine; primer.

XX Homo sapiens.

XX US6605272-B2.

XX 12-AUG-2003.

XX 03-AUG-2001; 2001US-00923246.

XX 09-MAR-1999; 99US-0123547P.

XX 11-MAR-1999; 99US-0123504P.

XX 01-JUL-1999; 99US-0142013P.

XX 09-MAR-2000; 2000US-00522217.

XX (ZYMO) ZYMOGENETICS INC.

XX Novak JE, Presnell SR, Sprecher CA, Foster DC, Holly RD;
XX Gross JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;
XX WPI; 2003-095283/82.

XX Stimulating an immune response in a mammal exposed to an antigen or
XX pathogen, useful for enhancing anti-tumor activity resulting in reduced
XX tumor progression or metastasis, comprises administering zalphall1 ligand
XX polypeptide.

XX Example 7; SEQ ID NO 39; 103pp; English.

XX The invention relates to stimulating an immune response in a mammal
XX exposed to an antigen or pathogen comprises administering a composition
XX comprising mature zalphall1 ligand polypeptide comprising residues 32-162
XX of ADH44572 in a pharmaceutical vehicle. Also included are stimulating an
XX immune response in a mammal exposed to an antigen or pathogen
XX (comprising: (a) determining (in)directly the level of antigen or
XX pathogen present in the mammal; (b) administering a composition
XX comprising zalphall1 ligand polypeptide in a pharmaceutical vehicle; (c)
XX determining (in)directly the level of antigen or pathogen in the mammal;
XX and (d) comparing the antigen or pathogen level in (a) with (b), where a
XX change in the level indicates stimulation of immune response), and
XX stimulating an immune response in a mammal exposed to an antigen or
XX pathogen (comprising: (a) determining a level of antigen- or pathogen-
XX specific antibody; (b) administering a composition comprising zalphall1
XX ligand polypeptide in a pharmaceutical vehicle; (c) determining a post
XX administration level of the antigen- or pathogen-specific antibody; and
XX (d) comparing the level of the antibody in (a) with (b), where an
XX increase in the antibody level indicates stimulation of immune response).
XX The method is useful for stimulating an immune response in a mammal
XX exposed to an antigen or pathogen, and for enhancing anti-tumor activity
XX resulting in a reduction in tumour progression, decrease in metastasis,
XX or a tumour stasis. The tumour may be a haematopoietic tumour, a lymphoma
XX or a B cell tumour. The zalphall1 ligand is useful for treating a wide
XX range of diseases arising from defects in the immune system, e.g.
XX systemic lupus erythematosus, rheumatoid arthritis, myasthenia gravis, or
XX diabetes, for boosting immunity to infectious diseases, treating
XX immunocompromised patients, such as HIV+ patients and in improving
XX vaccines. The present sequence is a sequencing primer used in the
XX exemplification of the invention.

XX Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;

XX Query Match 0.3%; Score 18.2; DB 1; Length 26;
XX Best Local Similarity 87.0%; Pred. No. 3.7e+02;
XX Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAATCAAAAAAAAAAGAAAAA 5415

DB 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAA 3

XX RESULT 238
XX ADI00945/c

```

ID ADI00945 standard; DNA; 26 BP.
XX
AC ADI00945;
XX
DT 22-APR-2004 (first entry)
XX
DE Sequencing primer SEQ 39 used to analyse human zalphall ligand clone DNA.
XX
KM zalphall ligand; immunity; infectious disease; immunocompromised patient;
XX HIV; vaccine; human; ss; PCR; primer.
XX
OS Homo sapiens.
XX
PN US2003125524-A1.
XX
PD 03-JUL-2003.
XX
PF 15-NOV-2002; 2002US-00295723.
XX
PR 09-MAR-2000; 2000US-00522217.
XX
PA (ZYMO ) ZYMOGENETICS INC.
XX
PI Novak JB, Presnell SR, Sprecher CA, Foster DC, Holly RD,
XX Gross JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK,
XX WPI; 2003-811003/76.
XX
PT New zalphall ligand polypeptides, useful for boosting immunity to
XX infectious diseases, and treating immunocompromised patients, such as
XX human immunodeficiency virus (HIV) patients, or in improving vaccines.
XX
PS Example 7; SEQ ID NO 39; 113pp; English.
XX
CC The invention relates to a novel isolated zalphall ligand polypeptide.
XX The polypeptide of the invention may be useful for boosting immunity to
XX infectious diseases and treating immunocompromised patients, such as HIV
XX patients, as well as in improving vaccines. The current sequence is that
XX of the PCR primer which was used in the exemplification of the invention.
XX
SQ Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 18.2; DB 1; Length 26;
Best Local Similarity 87.0%; Pred. No. 3.7e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAATCAAAAAAAAAAGAAAAA 5415
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAA 3
XX
RESULT 239
ADO47862/c
ID ADO47862 standard; DNA; 26 BP.
XX
AC ADO47862;
XX
DT 29-JUL-2004 (first entry)
XX
DE Gene expression inhibition associated poly(dt)-26mer primer.
XX
KM Gene expression, gene expression inhibition;
XX eukaryotic cell characteristic; cell division rate; pigmentation; cancer;
XX microbial infection; viral pathogenic infection;
XX cancer cell proliferation; poly(dt)-26mer primer; ss; primer.
XX
OS Synthetic.
XX
PN US2004087526-A1.
XX
PD 06-MAY-2004.
XX
PR 19-MAR-2003; 2003US-00393450.

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XX
XX 12-NOV-2001; 2001US-0351183P.
PR 18-JAN-2002; 2002US-00052486.
XX
PA (LINS/) LIN S.
XX (JIHH/) JI H H.
XX
PI Lin S, JI HH;
XX
DR WPI; 2004-356242/33.
XX
PT Composition useful for inhibiting the expression of a targeted gene in a
XX substrate, and for altering a characteristic of a eukaryote, comprises a
XX DNA-RNA hybrid.
XX
PS Example 5; SEQ ID NO 6; 40pp; English.
XX
CC The invention describes a composition (I) for inhibiting the expression of
XX a targeted gene in a substrate, comprising a DNA-RNA hybrid. (I) is
XX useful for inhibiting the expression of the targeted gene in a substrate.
XX The substrate is a prokaryote such as a viral or bacterial cell, or
XX eukaryote or the cell of the eukaryote such as a vertebrate. The
XX eukaryote is a mouse, rat, chimpanzee, preferably a human being. (I) is
XX useful for altering the characteristics of an eukaryotic cell. The
XX characteristic is chosen from expression of a protein, cell division rate
XX and pigmentation. (I) has an effect that lasts at least three days. (I)
XX is useful to inhibit the expression of messenger RNA in a cell. The
XX messenger RNA is transcribed from a gene chosen from viral gene,
XX oncogene, enzyme. (I) is useful for suppressing cancer, by knocking out
XX cancer related genes, for preventing and treating microbial infections,
XX preferably reducing viral pathogenic infection and for reducing the
XX proliferation of cancer cells. This sequence represents a poly(dt)-26mer
XX primer used in the creation of DNA-RNA hybrids for controlling gene
XX expression.
XX
SQ Sequence 26 BP; 0 A; 0 C; 0 G; 26 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 18.2; DB 1; Length 26;
Best Local Similarity 87.0%; Pred. No. 3.7e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAATCAAAAAAAAAAGAAAAA 5415
Db 26 AAAAAAAAAAAAAAAAAAAAAAAAAA 4
XX
RESULT 240
ADP19768/c
ID ADP19768 standard; DNA; 26 BP.
XX
AC ADP19768;
XX
DT 26-AUG-2004 (first entry)
XX
DE Human zalphall ligand PCR primer seqid 39.
XX
KM cytosstatic; zalphall ligand; pharmaceutical; cancer; immune response;
XX melanoma; tumour; solid tumour; haematopoietic tumour; lymphoma; human;
XX PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN US2004110932-A1.
XX
PD 10-JUN-2004.
XX
PF 10-SEP-2003; 2003US-00659684.
XX
PR 09-MAR-1999; 99US-0123547P.
XX 11-MAR-1999; 99US-0123504P.
PR 01-JUL-1999; 99US-0142013P.
XX 09-MAR-2000; 2000US-00522217.
XX

```

PA (ZYMO) ZYMOGENETICS INC.
 XX
 PI Novak JE, Prensell SR, Sprecher CA, Foster DC, Holly RD;
 PI Gross UB, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;
 XX
 DR WPI, 2004-440401/41.
 XX
 PT New zalphall ligand polynucleotide and polypeptide molecules, useful for
 PT treating cancer, e.g. melanoma, solid tumor, hematopoietic tumor, or
 PT lymphoma.
 XX
 PS Example 7; SEQ ID NO 39; 111pp; English.
 XX
 CC The invention describes an isolated polypeptide comprising a sequence of
 CC amino acid residues that is at least 90 or 95% identical to residues 41
 CC (Gln) to 148 (Ile), or 32 (Gln) to 148 (Ile) of a sequence of 162 amino
 CC acids (SEQ ID NO:2, human zalphall ligand), fully defined in the
 CC specification. Also described are: a pharmaceutical composition
 CC comprising the polypeptide, and a vehicle; a method of treating cancer in
 CC a mammal; a method of stimulating an immune response in a mammal with
 CC melanoma; a method of stimulating an immune response in a mammal bearing
 CC a tumour; an isolated polynucleotide comprising a sequence of nucleotides
 CC that encode amino acid residues cited above, where the polynucleotide
 CC encodes a polypeptide that binds a receptor comprising 538 amino acids,
 CC fully defined in the specification; a pharmaceutical composition
 CC comprising the polynucleotide encoding, in a pharmaceutically acceptable
 CC vehicle; an expression vector comprising the following operably linked
 CC elements a control element; and a DNA segment comprising the
 CC polynucleotide; and an isolated polynucleotide molecule comprising at
 CC least 10 nucleotides of the polynucleotide sequence of 642 bp, fully
 CC defined in the specification. The molecules, compositions and methods are
 CC useful for treating cancer, e.g. melanoma, solid tumour, haematopoietic
 CC tumour, or lymphoma. This sequence represents a primer used in the
 CC expression cloning of human cytokine zalphall ligand.
 XX
 SQ Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;
 Query Match 0.3%; Score 18.2; DB 1; Length 26;
 Best Local Similarity 87.0%; Pred. No. 3.7e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
 DB 25 AAAAAAAAAAAAAAAAAAAAAA 3
 RESULT 241
 ADQ80457
 ID ADQ80457 standard; DNA; 26 BP.
 XX
 AC ADQ80457;
 XX
 DT 09-SEP-2004 (first entry)
 XX
 DE Da(26) biotin primer.
 XX
 KM RNA hybrid; self normalization; five prime exon rescue; RNA linker; ss;
 KM primer.
 XX
 OS Unidentified.
 XX
 PN WO2004053160-A2.
 PD 24-JUN-2004.
 PF 08-DEC-2003; 2003WO-GB005341.
 XX
 PR 06-DEC-2002; 2002GB-00028557.
 XX
 PA (GENO-) GENOMICA SAU.
 PA (RUF/) RUFLES G K.
 PI Jimenez MC, Escobar IG, Gallego SC, Cimadevilla JCR;

XX
 DR WPI, 2004-507018/48.
 XX
 PT Experimentally analyzing boundaries within polymeric DNA or RNA
 PT molecules, useful in analyzing polymeric nucleic acid sequence
 PT variations; comprises hybridizing different RNA molecules to provide RNA
 PT / RNA hybrids.
 XX
 PS Disclosure; SEQ ID NO 14; 36pp; English.
 XX
 CC The present invention relates to experimentally analyzing boundaries
 CC within polymeric DNA or RNA molecules comprising hybridizing first and
 CC second different RNA molecules, derived from first and second samples, to
 CC provide RNA / RNA hybrids. The product of the method above is used as a
 CC probe. The method is useful in experimentally analyzing boundaries within
 CC polymeric DNA or RNA molecules. The methods are useful in analyzing
 CC polymeric nucleic acid sequence variations and in identifying molecules
 CC of therapeutic interest. The present sequence represents a RNA primer of
 CC the invention.
 XX
 SQ Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.3%; Score 18.2; DB 1; Length 26;
 Best Local Similarity 87.0%; Pred. No. 3.7e+02;
 Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 5393 AAAAAAAAAACAAAAAGAAAAA 5415
 DB 1 AAAAAAAAAAAAAAAAAAAAAA 23
 RESULT 242
 AAL47121/C
 ID AAL47121 standard; DNA; 18 BP.
 XX
 AC AAL47121;
 XX
 DT 20-AUG-2002 (first entry)
 XX
 DE Pyrin domain containing protein coding sequence PCR primer J71525.
 XX
 KM Pyrin domain; PYD domain; antiinflammatory; antiparkinsonian;
 KM antiarteriosclerotic; antidiabetic; antibacterial; virucide;
 KM neuroprotective; antiarthritic; antirheumatic; antiasthmatic;
 KM nephrotropic; osteoprotic; nocotropic; intracellular signal transduction;
 KM inflammation; Alzheimer's disease; infection; psoriasis; asthma;
 KM arteriosclerosis; multiple sclerosis; rheumatoid arthritis; sarcoidosis;
 KM osteoarthritis; glomerulonephritis; PCR; primer; ss.
 XX
 OS Unidentified.
 XX
 PN WO200240668-A2.
 PD 23-MAY-2002.
 PF 30-OCT-2001; 2001WO-EP012545.
 XX
 PR 15-NOV-2000; 2000DE-01056687.
 PR 30-NOV-2000; 2000DE-01059595.
 XX
 PA (APOT-) APOTECHE RES & DEV LTD.
 XX
 PI Tschopp J, Martinon F;
 XX
 DR WPI, 2002-427093/45.
 XX
 PT New DNA encoding protein with pyrin domain, useful for treating diseases
 PT involving impaired signal transduction, particularly inflammation, also
 PT proteins and antibodies.
 XX
 PS Example; Page 49; 116pp; German.
 CC The present invention relates the DNA and their encoded proteins, where

CC the proteins contain at least one PYD (pyrin) domain. These can be used
 CC to treat diseases associated with impaired intracellular signal
 CC transduction, particularly inflammation such as psoriasis,
 CC arteriosclerosis, bacterial or viral infections (particularly meningitis
 CC and pneumonia), multiple sclerosis, rheumatoid arthritis, asthma,
 CC sarcoidosis, glomerulonephritis and osteoarthritis, and also Alzheimer's
 CC and Parkinson's diseases. The present sequence is a PCR primer used to
 CC isolate a coding sequence of the invention

XX
 XX Sequence 18 BP; 5 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.3%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 3.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 868 GTGCTAATGCCCTGATC 885
 18 GTGCTAATGCCCTGATC 1

Db

RESULT 243
 AAL47123
 ID AAL47123 standard; DNA; 18 BP.
 XX AAL47123;
 AC
 XX 20-AUG-2002 (first entry)
 DT
 XX
 XX Pyrin domain containing protein coding sequence PCR primer J1527.
 DE
 XX
 XX Pyrin domain: PYD domain; antiinflammatory; antiparkinsonian;
 KM antiarteriosclerotic; antiparasitic; antibacterial; vitricide;
 KM neuroprotective; antichronic; antirheumatic; antiasthmatic;
 KM nephrotropic; osteoplastic; nootropic; intracellular signal transduction;
 KM inflammation; Alzheimer's disease; infection; psoriasis; asthma;
 KM arteriosclerosis; multiple sclerosis; rheumatoid arthritis; sarcoidosis;
 KM osteoarthritis; glomerulonephritis; PCR; primer; ss.

XX
 OS Unidentified.
 XX
 XX W0200240668-A2.
 PN
 XX
 XX 23-MAY-2002.
 PD
 XX
 XX 30-OCT-2001; 2001MO-EP012545.
 PF
 XX 15-NOV-2000; 2000DE-01056687.
 PR 30-NOV-2000; 2000DE-01059595.
 XX
 XX (APOT-) APOTECHE RES & DEV LTD.
 PA
 XX
 XX Tschopp J, Martinon F;
 PI
 XX
 XX WPI; 2002-427093/45.
 DR
 XX
 XX New DNA encoding protein with pyrin domain, useful for treating diseases
 PT involving impaired signal transduction, particularly inflammation, also
 PT proteins and antibodies.
 PT
 XX
 XX Example; Page 49; 116pp; German.

XX The present invention relates the DNA and their encoded proteins, where
 CC the proteins contain at least one PYD (pyrin) domain. These can be used
 CC to treat diseases associated with impaired intracellular signal
 CC transduction, particularly inflammation such as psoriasis,
 CC arteriosclerosis, bacterial or viral infections (particularly meningitis
 CC and pneumonia), multiple sclerosis, rheumatoid arthritis, asthma,
 CC sarcoidosis, glomerulonephritis and osteoarthritis, and also Alzheimer's
 CC and Parkinson's diseases. The present sequence is a PCR primer used to
 CC isolate a coding sequence of the invention

XX
 XX Sequence 18 BP; 3 A; 2 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 3.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 4411 GATGAGACTCTGCTGG 4428
 1 GATGAGACTCTGCTGG 18

Db

RESULT 244
 AD138836/c
 ID AD138836 standard; DNA; 20 BP.
 XX
 XX AD138836;
 AC
 XX 22-APR-2004 (first entry)
 DT
 XX
 XX Human LIM domain kinase 1 antisense oligonucleotide #120.
 DE
 XX
 XX neuroprotective; LIM domain kinase 1; developmental disorder;
 KM neurological disorder; diagnostic; prophylaxis; human; ss.

XX
 OS Homo sapiens.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER= Phosphorothioate backbone. All cytidines
 FT are 5-methylcytidines"
 FT modified_base 1..5
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
 FT modified_base 15..20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"

XX
 XX US2004014047-A1.
 PN
 XX
 XX 22-JAN-2004.
 PD
 XX
 XX 18-JUL-2002; 2002US-00199199.
 PF
 XX
 XX 18-JUL-2002; 2002US-00199199.
 PR
 XX
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX
 XX Cowbert LM, Dobie KM;
 PI
 XX
 XX WPI; 2004-121553/12.
 DR
 XX
 XX New antisense oligonucleotides for modulating LIM domain kinase 1
 PT expression, useful for diagnosing, preventing or treating conditions
 PT associated with the kinase, e.g. neurological or developmental disorders.
 PT
 XX
 XX Example 15; SEQ ID NO 135; 81pp; English.

XX The invention describes a compound 8-80 nucleobases in length targeted to
 CC a nucleic acid molecule encoding LIM domain kinase 1. The compound
 CC specifically hybridizes with the nucleic acid molecule encoding LIM
 CC domain kinase 1 and inhibits the expression of LIM domain kinase 1. It
 CC specifically hybridizes with at least an 8-nucleobase portion of a
 CC preferred target region on the nucleic acid molecule encoding LIM domain
 CC kinase 1. The antisense oligonucleotide is useful for modulating the
 CC expression of LIM domain kinase 1 in cells or tissues to treat diseases
 CC associated with their expression, such as a developmental disorder or a
 CC neurological disorder. In addition, the compound is used for diagnostic,
 CC prophylaxis, or as research reagents or kits. This sequence represents a
 CC human LIM domain kinase 1 antisense oligonucleotide.

XX
 XX Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.3%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2643 GCAGCTGCTGCTGCAGCC 2660
DB 20 GCAGCTGCTGCTGCAGCC 3

RESULT 245
AD138771
ID AD138771 standard; DNA; 20 BP.
AC AD138771;
DT 22-APR-2004 (first entry)

XX Human LIM domain kinase 1 antisense oligonucleotide #55.
XX
XX neuroprotective; LIM domain kinase 1; developmental disorder;
KM neurological disorder; diagnostic; prophylaxis; human; ss.
XX
XX Homo sapiens.

OS
XX
XX Key Location/Qualifiers
FH 1.20
FT modified_base /tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
are 5-methylcytidines"
FT 1.5
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT 15.20
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"

XX
XX US2004014047-A1.
XX
XX 22-JUN-2004.
XX
XX 18-JUL-2002; 2002US-00199199.
XX
XX 18-JUL-2002; 2002US-00199199.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cowesert LM, Dobie KW;
XX
XX WPI; 2004-121553/12.
XX
XX New antisense oligonucleotides for modulating LIM domain kinase 1
PT expression, useful for diagnosing, preventing or treating conditions
PT associated with the kinase, e.g. neurological or developmental disorders.
XX
XX Example 15; SEQ ID NO 70; 81bp; English.

XX
XX The invention describes a compound 8-80 nucleobases in length targeted to
CC a nucleic acid molecule encoding LIM domain kinase 1. The compound
CC specifically hybridizes with the nucleic acid molecule encoding LIM
CC domain kinase 1 and inhibits the expression of LIM domain kinase 1. It
CC specifically hybridizes with at least an 8-nucleobase portion of a
CC preferred target region on the nucleic acid molecule encoding LIM domain
CC kinase 1. The antisense oligonucleotide is useful for modulating the
CC expression of LIM domain kinase 1 in cells or tissues to treat diseases
CC associated with their expression, such as a developmental disorder or a
CC neurological disorder. In addition, the compound is used for diagnostic,
CC prophylaxis, or as research reagents or kits. This sequence represents a
CC human LIM domain kinase 1 antisense oligonucleotide.

Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2643 GCAGCTGCTGCTGCAGCC 2660
DB 1 GCAGCTGCTGCTGCAGCC 18

RESULT 246
AD13738/C
ID AD13738 standard; DNA; 21 BP.
AC AD13738;
DT 20-MAY-2004 (first entry)

XX Human DNA probe used to immobilise CpG methylated DNA SeqID 865.
XX
XX probe; ss; chemical modification; methylation; array; CpG island;
KM tumour suppressor; p16; human; H69; H1618.
XX
XX Homo sapiens.
XX
XX US2003152950-A1.
XX
XX 14-AUG-2003.
XX
XX 27-JUN-2002; 2002US-00184085.
XX
XX 27-JUN-2001; 2001US-0301370P.
XX
XX (GARNER/) GARNER H R.
PA (MINN/) MINNA J D.
PA (LUBKE/) LUBKE K J.
PA (BALOG/) BALOG R P.
XX
XX Garner HR, Minna JD, Lubke KJ, Balog RP;
XX
XX WPI; 2003-874843/81.
XX
XX Analysis of chemical modification of DNA involves obtaining sample of DNA
PT to be analyzed, treating DNA with chemical reagents that result in
PT different base sequences, and determining sequence of resulting DNA.
XX
XX Example 1; SEQ ID NO 865; 210bp; English.

XX
XX This invention relates to a novel method for analysing chemically
CC modified macromolecules. Specifically, it refers to a high throughput
CC method for the parallel analysis of many potential sites of chemical
CC modification (e.g. methylation) in DNA. The present invention describes
CC treating the DNA with one or more chemical reagents that result in
CC different base sequences depending upon the presence or absence of the
CC modification of interest. Accordingly, a device comprising an array of
CC probes is provided to hybridise with and select the altered DNA sequences
CC that comprise the modifications of interest such as a CpG island. In
CC particular, this invention refers to analysing the methylation pattern of
CC a region of the promoter for the tumour suppressor gene p16 from two
CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
CC is a human DNA probe used to immobilise CpG methylated DNA of the
CC invention.

XX
XX Sequence 21 BP; 2 A; 11 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 0.3%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 3.8e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2436 GGATGGAAGGGGAGAGG 2453
DB 19 GGATGGAAGGGGAGAGG 2

```

RESULT 247
ID AAT85350/c
AC AAT85350 standard; DNA; 23 BP.
XX
XX AAT85350;
XX
DT 09-DEC-1997 (first entry)
XX
DE Spider silk protein target DNA primer (xv).
XX
XX High strength film; fibre; woven article; parachutes; sails; absorber;
KM body armour; heavy metal; biological weapon; chemical; flavour;
KM fragrance; Nephila clavipes; ss.
XX
OS Synthetic.
XX
XX MO9708315-A1.
XX
XX 06-MAR-1997.
XX
XX 22-AUG-1996; 96WO-US013767.
XX
XX 22-AUG-1995; 95US-00517694.
XX
XX (BASE/) BASEL R M.
XX (ELIO/) ELION G R.
XX
XX Basel RM, Elion GR;
XX
XX WPI; 1997-179272/16.
XX
XX New opt. multimerised DNA sequences encoding spider silk protein - contg.
PT both repetitive and non-repetitive sequences, useful for making high
PT strength films, fibres, woven articles etc.
XX
XX Claim 7; Page 54; 57pp; English.
XX
XX A process has been developed for the production of a DNA fragment
XX encoding silk protein. The process involves: (a) selecting target DNA,
XX from a silk-producing spider, that contains many repetitive and non-
XX repetitive regions; (b) selecting a single-stranded DNA primer of at
XX least 10 nucleotides with a sequence that is complementary to a region of
XX the target; (c) repetitively combining the primer with melted target DNA,
XX incubating the mixture with nucleotides and a DNA polymerase with
XX proofreading activity to produce a DNA fragment which is complementary to
XX the target and is at least 2 kb long. The present sequence represents a
XX specifically claimed primer for use in this process. The DNA fragment can
XX be used to make fibres, films, woven articles, e.g. for use in
XX parachutes, sails, body armour, and absorbers (e.g. of heavy metals,
XX biological weapons, DNA, chemicals, flavours and fragrances). The high
XX molecular weight (90-250 kD) of spider silk proteins can be produced on a
XX commercial scale (at over 2 g/1 cell mass). It has better tensile
XX strength and elasticity than silkworm silk. Inclusion of both repetitive
XX and non-repetitive regions ensures isolation of stable clones
XX
XX Sequence 23 BP; 4 A; 6 C; 10 G; 2 T; 0 U; 1 Other;
SQ
Query Match 0.3%; Score 18; DB 1; Length 23;
Best Local Similarity 90.0%; Pred. No. 3.8e+02;
Matches 18; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
OY 2640 CCTGCAGCTGCTGCTGCAGC 2659
DB 23 CCGCAGCTGCTGCTGCTGC 4

```

```

XX
XX 25-MAR-1998 (first entry)
XX
XX Phosphorothioate oligonucleotide #1.
DE
XX Phosphorothioate oligonucleotide; dimeric phosphoramidite synthon;
XX thioester; DNA synthesis; antisense oligonucleotide; gene therapy; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX misc_difference 1..21
XX /tag= a
XX /note= "Phosphorothioate linkages between alternate
XX nucleotides (1 and 2, 3 and 4 etc.)"
XX
XX MO9729116-A1.
XX
XX 14-AUG-1997.
XX
XX 06-FEB-1997; 97WO-GB000327.
XX
XX 06-FEB-1996; 96GB-00002326.
XX
XX (CRUA-) CRUACHEM LTD.
XX
XX Reese CB, Rao MV;
XX
XX WPI; 1997-415290/38.
XX
XX Solid phase synthesis of phosphorothioate oligonucleotide(s) using new
XX dimeric synthon(s) - useful as anti-sense molecules for inhibiting gene
XX expression.
XX
XX Example 3; Page 20; 38pp; English.
XX
XX The present sequence represents a phosphorothioate oligonucleotide which
XX was prepared by solid phase synthesis. The method comprises adding at
XX least one dimeric phosphoramidite synthon, optionally having a protected
XX thioester group in its internucleotide link, during the synthesis cycle.
XX These novel dimeric phosphoramidite synthons are used as antisense
XX molecules for inhibition of gene expression. The method gives increased
XX yields of the phosphorothioate oligonucleotide (since fewer cycles are
XX needed) and facilitates separation of impurities (greater difference in
XX size compared with use of monomeric synthons)
XX
XX Sequence 21 BP; 0 A; 10 C; 0 G; 11 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 4e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1180 AGAGAGAGAGAGAGAGAGAA 1200
DB 21 AGAGAGAGAGAGAGAGAGAGA 1

```

```

RESULT 249
AAX22013
ID AAX22013 standard; DNA; 21 BP.
XX
XX AAX22013;
XX
XX 19-MAY-1999 (first entry)
XX
XX PCR primer for human MED1 endonuclease coding sequence.
XX
XX Endonuclease; MED1; human; methyl-CpG binding endonuclease-1; PCR primer;
XX DNA fidelity; DNA manipulation; cancer; fragile X syndrome; therapy;
XX myotonic dystrophy; Huntington's disease; spinocerebellar ataxia;
XX Kennedy's disease; triplet repeat expansion disorder; ss.
XX
XX Synthetic.
OS

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OS Homo sapiens.
XX
XX W09904626-A1.
XX
XX 04-FEB-1999.
XX
XX 28-JUL-1998; 98MO-US015828.
XX
XX 28-JUL-1997; 97US-0053936P.
XX
XX (FOX-) FOX CHASE CANCER CENT.
XX
XX Bellacosa A;
XX
XX WPI; 1999-142462/12.
XX
XX New nucleic acid encoding human endonuclease MED1 involved in DNA
PT mismatch repair - used for diagnosing susceptibility to cancer and
PT fragile X syndrome, and therapeutically.
XX
XX Example 1; Page 45; 109pp; English.
XX
XX This sequence is a PCR primer for DNA encoding the human MED1
CC endonuclease of the invention. MED1 (methyl-CpG binding endonuclease-1)
CC is used to screen for specific modulators (potential therapeutic agents
CC particularly mimetics of MED1) and to study interactions involved in
CC maintaining DNA fidelity, for DNA manipulation and to raise antibodies.
CC Susceptibility or predisposition to cancer (particularly colorectal or
CC endometrial, especially hereditary non-polypoid colorectal cancer), or
CC its prognosis, where caused by alterations in the MED1-encoding gene, are
CC identified by sequence comparison, amplification, detecting altered
CC polypeptide, and restriction fragment mapping, hybridisation
CC (particularly to probes specific for a mutant allele). These same methods
CC can also be used to diagnose fragile X syndrome and other diseases (e.g.
CC myotonic dystrophy, Huntington's disease, spinocerebellar ataxia and
CC Kennedy's disease) associated with triplet repeat expansion. The DNA, or
CC its fragments, are used as probes and primers in the above diagnostic
CC methods, also to isolate homologous sequences, as sources of antisense
CC sequences and for gene transfer, particularly to restore drug sensitivity
CC to drug-resistant cancer cells
XX
XX Sequence 21 BP; 6 A; 3 C; 7 G; 5 T; 0 U; 0 Other:
SQ
Query Match 0.3%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 4e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1415 GAAGCTGACCTGATTAATGCG 1435
Db 1 GAAGCTGACCTGATTAATGCG 21
RESULT 250
ADH70613/C
ID ADH70613 standard; DNA; 21 BP.
XX
XX ADH70613;
XX
XX 25-MAR-2004 (first entry)
DE Human Vbeta gene repeat sequence #403.
XX
XX human; T-cell associated disease; Vbeta; autoimmune disease;
XX degenerative nervous system disease; graft versus host disease;
XX hypersensitivity disease; infectious disease; neoplastic disease;
XX Addison's disease; atrophic gastritis;
XX degenerative nervous system disease; multiple sclerosis;
XX Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
XX allergy; type II hypersensitivity; Goodpasture's syndrome;
XX type IV hypersensitivity; leprosy; infectious disease; viral infection;
XX HIV; fungal infection; Candida; parasitic infection; schistosoma;
XX filaria; bacterial infection; Mycobacterium; neoplastic disease;
XX lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;

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XX breast cancer; ds.
XX
XX Homo sapiens.
XX
XX US2002150891-A1.
XX
XX 17-OCT-2002.
XX
XX 05-MAR-1999; 99US-00263959.
XX
XX 19-SEP-1994; 94US-00309335.
XX
XX 19-SEP-1995; 95US-00531241.
XX
XX (HOOD/) HOOD L E.
XX
XX (ROME/) ROWEN L.
XX
XX Hood LE, Rowen L;
XX
XX WPI; 2004-059052/06.
XX
XX Kit for diagnosing and treating T-cell associated diseases e.g.
PT autoimmune, degenerative nervous system and infectious disease, comprises
PT nucleic acid primers specifically priming and allowing amplification of a
PT vbeta gene.
XX
XX Disclosure; SEQ ID NO 807; 164pp; English.
XX
XX The invention relates to a kit for diagnosing and treating T-cell
CC associated diseases which comprises a panel of nucleic acid primers
CC specifically priming and allowing amplification of each Vbeta gene,
CC VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
CC rejection and diagnosing and treating T-cell associated diseases
CC including autoimmune diseases, degenerative nervous system diseases,
CC graft versus host disease, hypersensitivity diseases, infectious diseases
CC and neoplastic diseases. Autoimmune diseases include Addison's disease,
CC atrophic gastritis, degenerative nervous system diseases include multiple
CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
CC I hypersensitivity diseases such as contact with allergens that lead to
CC allergies, Type II hypersensitivity diseases such as those present in
CC Goodpasture's syndrome and Type IV hypersensitivity diseases such as those
CC manifested in leprosy. Infectious diseases include viral infections
CC caused by viruses such as HIV, fungal infections such as those caused by
CC the yeast genus Candida, parasitic infections such as those caused by
CC schistosomes, filaria and bacterial infections such as those caused by
CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
CC such as leukaemias, lymphomas and cancers such as cancer of the brain,
CC breast. The present sequence represents a Vbeta gene repeat sequence.
XX
XX Sequence 21 BP; 0 A; 10 C; 0 G; 11 T; 0 U; 0 Other:
SQ
Query Match 0.3%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 4e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1180 AGAGAGAGAGAGAGAGAGAA 1200
Db 21 AGAGAGAGAGAGAGAGAGAGA 1
RESULT 251
AAQ34355
ID AAQ34355 standard; DNA; 22 BP.
XX
XX AAQ34355;
XX
XX 25-MAR-2003 (revised)
DT 02-FEB-1993 (first entry)
XX
XX Upstream PCR primer TGLA351UP1.
DE
XX PCR; selection; microsatellite; OPTIPRM; breeding; cattle; parentage;
XX genetic mapping; traits; amplification; ss.
XX

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OS Bos taurus.
 XX
 PI W09213102-A1.
 XX
 PD 06-AUG-1992.
 XX
 PF 15-JAN-1992; 92MO-US000340.
 XX
 PR 15-JAN-1991; 91US-00642342.
 XX
 PA (GENM-) GENMARK.
 XX
 PI Georges M, Massey JM;
 XX
 DR WPI; 1992-284684/34.
 XX
 PT Polymorphic bovine DNA markers - used in genetic identification, gene
 mapping, and selective breeding.
 XX
 PS Table 8; Page 471; 517pp; English.
 XX
 CC The sequence shows an upstream PCR primer for in vitro amplification of
 CC bovine microsatellite sequences obt'd. by screening library of bovine MboI
 CC DNA fragments of between 250 and 500 bp with an (AC)₁₅ and a (TC)₁₅
 CC oligonucleotide probe. One out of 50 clones cross-hybridised. Assuming
 CC independent distribution of microsatellites and MboI sites, the frequency
 CC of (T6)_n > microsatellites in the bovine genome is estimated at
 CC >100,000. The sequence information for ca. 230 such bovine
 CC microsatellites is summarised in the specification and indexed herein
 CC (see below). For each such microsatellite sequence sufficient information
 CC was obt'd. to generate the required PCR primers for in vitro amplification
 CC of the corresp. microsatellite (using the program OPRIPRM). The
 CC microsatellites may be used to identify individuals, for parentage
 CC testing, and in the genetic mapping of economic trait loci, or genes
 CC involved in the determination of economically important traits esp. in cattle,
 CC to allow selective breeding. See also AAQ3501-34440. (Updated on 25-MAR-
 CC 2003 to correct PN field.)
 XX
 SQ Sequence 22 BP; 5 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 17.8; DB 1; Length 22;
 Best Local Similarity 90.5%; Pred. No. 4.1e+02;
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 XX
 QY 5069 CTGATCTGGTGGCCACGCG 5089
 DB 2 CACATCTGGTGGCCACATCAG 22
 XX
 RESULT 252
 AAT76462/C
 ID AAT76462 standard; DNA; 22 BP.
 XX
 AC AAT76462;
 XX
 DT 16-SEP-1997 (first entry)
 XX
 DE Chymase antisense oligonucleotide.
 XX
 KM Asthma; airway epithelium; adenosine free; cystic fibrosis;
 KM chronic obstructive pulmonary disease; bronchitis; ss.
 XX
 OS Synthetic.
 XX
 PN W09640162-A1.
 XX
 PD 19-DEC-1996.
 XX
 PF 06-JUN-1996; 96MO-US009306.
 XX
 PR 07-JUN-1995; 95US-00474497.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.

XX
 PI Nyce JM, Metzger WJ;
 XX
 DR WPI; 1997-051871/05.
 XX
 PT Treatment of airway diseases such as asthma - by topically applying
 PT adenosine-free antisense oligonucleotide to airway epithelium of
 XX subject.
 XX
 PS Example 5; Page 41; 71pp; English.
 XX
 CC A method for treating airway disease in a subject has been produced,
 CC which involves the topical administration of an essentially adenosine
 CC free antisense oligonucleotide (ON) to the airway epithelium of the
 CC subject. The present sequence is an antisense oligonucleotide specific
 CC for chymase. The method can be used to treat airway diseases such as
 CC cystic fibrosis, asthma, chronic obstructive pulmonary disease,
 CC bronchitis and other airway diseases characterised by an inflammatory
 CC response. By eliminating adenosine from the antisense ON, its liberation
 CC upon antisense degradation is prevented, thereby preventing adenosine-
 CC induced bronchoconstriction in patients with hyper-reactive airways
 XX
 SQ Sequence 22 BP; 0 A; 10 C; 2 G; 10 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 17.8; DB 1; Length 22;
 Best Local Similarity 90.5%; Pred. No. 4.1e+02;
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 XX
 QY 148 CAGGACCCAGAGAGGAGAGA 168
 DB 21 CAGGAGACAGAGAGGAGAGA 1
 XX
 RESULT 253
 AAX54254/C
 ID AAX54254 standard; DNA; 22 BP.
 XX
 AC AAX54254;
 XX
 DT 05-JUL-1999 (first entry)
 XX
 DE Chymase antisense oligonucleotide fragment.
 XX
 KM Antisense oligonucleotide; multiple target; antisense treatment;
 KM impaired respiration; inflammation; lung disease; allergic rhinitis;
 KM pulmonary vasoconstriction; inflammation; allergic rhinitis;
 KM acute asthma; allergy; asthma; impeded respiration;
 KM respiratory distress syndrome; pain; cystic fibrosis;
 KM pulmonary hypertension; pulmonary vasoconstriction; emphysema;
 KM chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
 KM colon cancer; breast cancer; lung cancer; pancreatic cancer;
 KM hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
 KM prostate cancer; ss.
 XX
 OS Synthetic.
 XX
 PN W09913886-A1.
 XX
 PD 25-MAR-1999.
 XX
 PF 17-SEP-1998; 98MO-US019419.
 XX
 PR 17-SEP-1997; 97US-0059160P.
 XX
 PR 09-JUN-1998; 98US-00093972.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JM;
 XX
 DR WPI; 1999-229400/19.
 XX
 PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
 PT vasoconstriction.

XX PS Disclosure; Page 60; 120pp; English.
XX PS
XX CC The specification describes antisense oligonucleotides (AA52869-X55271)
CC directed against at least 2 mRNAs selected from target genes, coding and
CC non-coding regions of RNAs corresponding to target genes, gene initiation
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
CC end and the junction between coding and non-coding regions and all
CC segments of RNAs encoding proteins associated with one or more diseases,
CC conditions or mixtures. The antisense oligonucleotides may be derived
CC from sequences AA55272-74. These multiple target oligonucleotides
CC (specifically AA55180-271) can be used for the antisense treatment of
CC diseases and conditions. Typical diseases and conditions are those
CC associated with impaired respiration and inflammation, including lung
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC acute asthma, allergies, asthma, impaired respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC well as all types of cancers which may metastasize or have metastasized
CC to the lungs, including breast and prostate cancer
SQ Sequence 22 BP; 0 A; 10 C; 2 G; 10 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.8; DB 1; Length 22;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 148 CAGGACCCAGAGAGGAGA 168
Db 21 CAGGAGACAGAGAGGAGA 1
AA33698/c
ID AAA33698 standard; DNA; 22 BP.
AC AAA33698;
XX 28-UTL-2000 (first entry)
XX Low adenosine antisense oligonucleotide SEQ ID NO:1387.
XX Human; adenosine receptor; low adenosine antisense oligonucleotide;
XX phosphorothioate; impaired respiration; inflammation; allergy;
XX allergic diseases; bronchoconstriction; inhibitor; antiinflammatory;
XX antiallergic; antiasthmatic; cycostatic; analgesic; impaired airway;
XX lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
XX respiratory distress syndrome; pain; cystic fibrosis; emphysema;
XX pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
XX cancer; leukemia; lymphoma; carcinoma; metastasis; ss.
XX Homo sapiens.
XX WO200009525-A2.
XX 24-FEB-2000.
XX 03-AUG-1999; 99WO-US017712.
XX 03-AUG-1999; 98US-0095212P.
XX (UYEC-) UNIV EAST CAROLINA.
XX NYce JW;
XX WPI; 2000-205971/18.
XX New antisense oligonucleotides useful for treating e.g. pulmonary
XX vasoconstriction, inflammation, allergies, asthma, hypertension,
XX bronchitis, emphysema, respiratory distress syndrome, ischemia or

PT cancers.
XX PS Claim 18; Page 438; 1343pp; English.
XX PS
XX CC The present invention describes a new composition comprising an antisense
CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC nucleic acids involved in bronchoconstriction, allergies, and/or
CC inflammation. The ON can have antiinflammatory, antiallergic,
CC antiasthmatic, cycostatic and analgesic activities. The compositions are
CC useful for the treatment of diseases associated with inflammation,
CC impaired airways, including lung disease and diseases whose secondary
CC effects afflict the lungs of a subject. They can be used for treating
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC impaired respiration, respiratory distress syndrome, pain, cystic
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC pulmonary disease (COPD), and cancers such as leukemias, lymphomas,
CC carcinomas, and cancers which may metastasize to the lungs, including
CC breast and prostate cancer. The reduction of the adenosine content of the
CC ONs reduces side effects. The A-containing ONs break down with the
CC release of deoxyadenosine which activates adenosine receptors causing the
CC bronchoconstriction and inflammation. AAA3213 to AAA3532 represent the
CC nucleotide sequences given in the sequence listing from the present
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA3223 to
CC AAA3392) are specifically claimed ONs from the present invention. N.B.
CC Sequences given in the disclosure of the present invention do not match
CC up with their corresponding SEQ ID NO: sequences given in the sequence
CC listing
SQ Sequence 22 BP; 0 A; 10 C; 2 G; 10 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.8; DB 1; Length 22;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 148 CAGGACCCAGAGAGGAGA 168
Db 21 CAGGAGACAGAGAGGAGA 1
AA19820/c
ID AA19820 standard; DNA; 22 BP.
AC AA19820;
XX 14-MAR-2001 (first entry)
XX Human chymase polynucleotide fragment #1387.
XX DE
XX Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
XX human; airway disorder; bronchoconstriction; lung inflammation;
XX surfactant depletion; respiratory; bronchodilator; antiinflammatory;
XX immunosuppressive; antiasthmatic; analgesic; hypotensive; cycostatic;
XX respiratory obstruction; pulmonary obstruction; impaired respiration;
XX surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
XX respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
XX pulmonary hypertension; emphysema; pulmonary transplantation rejection;
XX chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
XX cancer; ss.
XX Homo sapiens.
XX WO200062736-A2.
XX 26-OCT-2000.
XX 24-MAR-2000; 2000WO-US008020.
XX 06-APR-1999; 99US-0127958P.
XX (UYEC-) UNIV EAST CAROLINA.

XX (COLE-) COLEY PHARM GROUP INC.
XX Bratzler RL,
XX WPI, 2002-566690/60.
XX
XX Inhibiting angiogenesis in a subject, involves administering at least one
XX antiangiogenic nucleic acid molecule to the subject.
XX
XX Claim 2; Page 35; 276pp; English.
XX
XX The invention relates to inhibiting angiogenesis in a subject, comprising
XX administering at least one antiangiogenic nucleic acid molecule. Also
XX included is a kit comprising a first container housing the antiangiogenic
XX nucleic acids, and instructions for administering them to a subject
XX having a condition characterised by unwanted angiogenesis. The method is
XX useful for inhibiting angiogenesis associated with solid tumour growth,
XX tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
XX diabetic retinopathy, retinopathy of prematurity, macular degeneration,
XX corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
XX rubecosis, Ogler-Webber Syndrome, myocardial angiogenesis, plaque
XX neovascularisation, telangiectasia, haemophilic joints, angiodioma,
XX wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
XX hypertrophic scars. The present sequence is an antiangiogenic nucleic
XX acid of the invention
SQ Sequence 22 BP; 0 A; 11 C; 0 G; 11 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.8; DB 1; Length 22;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1180 AGAGAAAGAGAGAGAGAAA 1200
DB 22 AGAGAGAGAGAGAGAGAGAGA 2
RESULT 258
ACH03242/c
ID ACH03242 standard; DNA; 22 BP.
AC ACH03242;
XX
XX 25-SEP-2003 (first entry)
XX
XX Immunostimulatory nucleic acid #877.
XX
XX Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
XX anticulcer; gene therapy; vaccine; non-allergic inflammatory disease;
XX psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
XX inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
XX
XX Synthetic.
XX
XX US2003050268-A1.
XX
XX 13-MAR-2003.
XX
XX 29-MAR-2002; 2002US-00112653.
XX
XX 29-MAR-2001; 2001US-0279642P.
XX
XX (KRIG/) KRIG A M.
XX (BERG/) BERG D J.
XX
XX Krieg AM, Berg DJ;
XX
XX WPI; 2003-521815/49.
XX
XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
XX allergic contact dermatitis, latex dermatitis or inflammatory bowel
XX disease by administering an immunostimulatory nucleic acid.
PT

XX Disclosure; Page 32; 229pp; English.
XX
XX The invention describes a method of treating non-allergic inflammatory
XX disease comprising administering to a subject having or at risk of
XX developing a non-allergic inflammatory disease an immunostimulatory
XX nucleic acid for prevention or treatment of the disease. The method is
XX useful for treating non-allergic inflammatory diseases, such as
XX psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
XX inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
XX This sequence represents an immunostimulatory nucleic acid
XX
SQ Sequence 22 BP; 0 A; 11 C; 0 G; 11 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.8; DB 1; Length 22;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1180 AGAGAAAGAGAGAGAGAAA 1200
DB 22 AGAGAGAGAGAGAGAGAGAGA 2
RESULT 259
ADB37205/c
ID ADB37205 standard; DNA; 22 BP.
AC ADB37205;
XX
XX 04-DEC-2003 (first entry)
XX
XX Immunostimulatory nucleic acid #819.
XX
XX de; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX hypo-responsive subject; immunostimulatory.
XX
XX Synthetic.
XX
XX US2003087848-A1.
XX
XX 08-MAY-2003.
XX
XX 02-FEB-2001; 2001US-00776479.
XX
XX 03-FEB-2000; 2000US-0179991P.
XX
XX (BRAT/) BRATZLER R L.
XX (PETE/) PETERSEN D M.
XX (FOUR/) FOURON Y.
XX
XX Bratzler RL, Petersen DM, Fouron Y;
XX
XX WPI; 2003-657977/62.
XX
XX Treating and/or preventing allergy or asthma using an immunostimulatory
XX nucleic acid alone or in combination with an asthma/allergy medicament.
XX
XX Disclosure; Page 17; 221pp; English.
XX
XX The invention relates to a method of treating or preventing allergy or
XX asthma which comprises administering to a subject a poly-G nucleic acid
XX in an aerosol formulation. The methods and compositions of the present
XX invention are useful for diagnosing and/or treating asthma and allergy
XX especially in a hypo-responsive subject. The present sequence represents
XX an immunostimulatory nucleic acid of the invention.
XX
SQ Sequence 22 BP; 0 A; 11 C; 0 G; 11 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.8; DB 1; Length 22;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1180 AGAGAAAGAGAGAGAGAAA 1200

Db 22 AGGAGAGAGAGAGAGAGA 2

|||||

RESULT 260
ADCl3691/c
ID ADCl3691 standard; DNA; 22 BP.
XX
XX
ADCl3691;
18-DEC-2003 (first entry)
XX
XX
Human NOVX probe, SEQ ID NO 176.
XX
XX
NOVX, FADD interacting protein; ATPase; H+ Transporting; Lysosomal;
KW RGF 17; Single Pass Transmembrane; Beta-Ketoadyl Synthase; Neuratin 2;
KW Glutamate Receptor Interacting Protein 2; Chr-Methyltransferase;
KW NP25 Variant; GTPase-Activating Protein; ERKs; Sim2; RhoGAP;
KW Phospholipase; Scavenger Receptor Domain Containing Protein;
KW Metallothionein IA; NOGO receptor; FYVE; NOELIN;
KW Cyclin Regulatory Subunit; Tetratricco Peptide Repeat Protein;
KW Immunoglobulin Domain Containing Protein; PA Domain Containing Protein;
KW Phenylalanine; Histidine Ammonia-Lyase; Cellular Retinaldehyde-Binding;
KW Glutamine Repeat Containing Protein; TNF Receptor Associated Factor2;
KW Vacuolar Protein Sorting Homologue R-VPS33A;
KW Bola Domain Containing Protein; Neurotrophin Receptor;
KW RAL Guanine Nucleotide Dissociation Stimulator; Armadillo/Beta-Catenin;
KW Metalloprotease; T10 Ser/Thr-rich; Ring finger-like; cytosstatic;
KW gene therapy; vaccine; cancer; probe; ss.
XX
XX
Homo sapiens.
XX
XX
MO2003004617-A2.
XX
PD 16-JAN-2003.
XX
PF 03-JUL-2002; 2002MO-US021359.
XX
XX
05-JUL-2001; 2001US-0303046P.
PR 09-JUL-2001; 2001US-0303828P.
PR 11-JUL-2001; 2001US-0304502P.
PR 12-JUL-2001; 2001US-0305011P.
PR 13-JUL-2001; 2001US-0305262P.
PR 17-JUL-2001; 2001US-0306085P.
PR 24-JUL-2001; 2001US-0307556P.
PR 27-JUL-2001; 2001US-0308228P.
PR 30-JUL-2001; 2001US-0308877P.
PR 01-AUG-2001; 2001US-0309255P.
PR 10-AUG-2001; 2001US-0311753P.
PR 19-SEP-2001; 2001US-0323449P.
PR 22-FEB-2002; 2002US-0358932P.
PR 05-MAR-2002; 2002US-0361765P.
PR 02-JUL-2002; 2002US-00188248.
XX
XX
(CURA-) CURAGEN CORP.
XX
XX
Patturajan M, Gerlach VL, Anderson DW, Taupier RJ, Zernusen BD;
PI Guo X, Caeman SJ, Hjalte T, Miller CB, Kekuda R, Shinkets PA;
PI Malyanekar UM, Zhong M, Padigaru M, Li L, Shenoy SG, Gorman L;
PI Edinger SR;
XX
XX
WPI; 2003-201550/19.
XX
XX
New NOVX polypeptide, useful for preparing a composition for treating or
PT preventing cancer.
XX
XX
Example 37; Page 303; 393pp; English.
XX
XX
The invention relates to a novel isolated NOVX polypeptide comprising: a
CC sequence of 57-1149 amino acids as defined in the specification, or its
CC mature form; a sequence that is at least 95% identical to the 57-1149
CC amino acid polypeptide; or a sequence comprising one or more conservative
CC substitutions in the 57-1149 amino acid polypeptide. The NOVX proteins of

CC the invention include the following protein families: FADD interacting
CC protein-like, ATPase, H+ Transporting, Lysosomal (vacuolar proton pump)-
CC like, RGF 17-like, Single Pass Transmembrane-like, Beta-Ketoadyl Synthase
CC like, Neuratin 2-like, Glutamate Receptor Interacting Protein 2-like,
CC Chr-Methyltransferase-like, NP25 Variant-like, GTPase-Activating Protein-
CC like, ERKs-like, Sim2-like, RhoGAP-like, Phospholipase-like, Scavenger
CC Receptor Domain Containing Protein-like, Metallothionein IA-like, NOGO
CC receptor-like, FYVE-protein, NOELIN-like, Cyclin Regulatory Subunit-like,
CC Tetratricco Peptide Repeat Protein-like, Immunoglobulin Domain Containing
CC protein-like, PA Domain Containing Protein-like, Phenylalanine and
CC Histidine Ammonia-Lyase-like, Cellular Retinaldehyde-Binding-like,
CC Glutamine Repeat Containing Protein-like, TNF Receptor Associated Factor2
CC like, Vacuolar Protein Sorting Homologue R-VPS33A, Bola Domain
CC Containing Protein-like, Neurotrophin Receptor-like, RAL Guanine
CC Nucleotide Dissociation Stimulator-like, Armadillo/Beta-Catenin-like,
CC Metalloprotease-like, T10 Ser/Thr-rich-like, and Ring finger-like
CC protein. The NOVX proteins and the encoding polynucleotides have
CC cytosstatic activity and can be used in gene therapy or a vaccine. The
CC NOVX polypeptide is useful for preparing a composition for treating or
CC preventing cancer. This polynucleotide sequence represents a probe of a
CC gene encoding a NOVX protein of the invention.
XX
XX
SQ Sequence 22 BP; 7 A; 8 C; 6 G; 1 T; 0 U; 0 Other;
XX
XX
Query Match 0.3%; Score 17.8; DB 1; Length 22;
Best local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 3682 GTGGAACCTTGTGCGTCCT 3702
Db 21 GTGGACTCCTGTGCGTCCT 1
XX
XX
RESULT 261
AB295514/c
ID AB295514 standard; DNA; 22 BP.
XX
XX
AB295514;
AC
XX
XX
17-OCT-2003 (first entry)
XX
XX
Human chymase antisense fragment no.1378.
XX
XX
Human: antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiinflammatory; hypotensive; immunosuppressive; cytosstatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX
Homo sapiens.
OS
XX
XX
WO200285308-A2.
XX
XX
31-OCT-2002.
XX
XX
23-APR-2002; 2002MO-US011135.
XX
XX
24-APR-2001; 2001US-0286137P.
XX
XX
(EPIC-) EPIGENESIS PHARM INC.
XX
XX
Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX
WPI; 2003-229219/22.
XX
XX
Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX ubiquinone.
XX
XX
Disclosure; SEQ ID NO 10756; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_sequences

SEQ Sequence 22 BP; 0 A; 10 C; 2 G; 10 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.8; DB 1; Length 22;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 148 CAGGACCCGAGAGGAGAGA 168
Db 21 CAGGAGACGAGAGGAGAGA 1

RESULT 262
ABD19659/c
ID ABD19659 standard; DNA; 22 BP.

AC ABD19659;

DT 29-JUL-2004 (first entry)

XX Human chymase DNA fragment 1378.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ds.

OS Homo sapiens.

PN WO200285309-A2.

PD 31-OCT-2002.

PF 23-APR-2002; 2002WO-US013143.

PR 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahbuddin S;

XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.

XX Claim 15; SEQ ID NO 10756; 763bp; English.

PS This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it

SEQ Sequence 22 BP; 0 A; 10 C; 2 G; 10 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.8; DB 1; Length 22;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 148 CAGGACCCGAGAGGAGAGA 168
Db 21 CAGGAGACGAGAGGAGAGA 1

RESULT 263
ADK61705/c
ID ADK61705 standard; DNA; 22 BP.

AC ADK61705;

DT 06-MAY-2004 (first entry)

XX Base containing SSR sequence #9.

XX rice variety; amplification genetic marker; ds.

OS Oryza sp.

PN JP2003319782-A.

PD 11-NOV-2003.

PF 02-MAY-2002; 2002JP-00130645.

PR 02-MAY-2002; 2002JP-00130645.

XX (HOKU-) HOKUREN NOGYO KYODO KUMIAI.

PA (HOKK-) HOKKAIDO GREEN BIO KENKYUSHO KK.

XX WPI; 2004-003560/01.

XX Identifying rice variety using base sequence containing SSR sequence and
PT

```

PT amplifying genetic marker.
XX
PS Claim 34; SEQ ID NO 9; 30bp; Japanese.
XX
CC The present invention relates to identifying a rice variety as
CC amplification genetic marker and identifying whether test rice variety is
CC any one of the 32 rice varieties e.g., Kasalath, breath which came or
CC Hayanagari, Italic Livorno, Dungan Shail, Aroz Da Terra, Fany, USSR22,
CC Nihonbare. The method is useful for identifying rice variety and
CC identifies excellent rice variety. The present sequence represents a base
CC - containing SSR sequence of the invention.
XX
SQ Sequence 22 BP; 0 A; 11 C; 11 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 17.8; DB 1; Length 22;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1180 AGAGAAAGAGAGAGAGAAA 1200
DB 22 AGAGAGAGAGAGAGAGAGA 2
XX
RESULT 264
ADK61713
ID ADK61713 standard; DNA; 22 BP.
AC ADK61713;
XX
XX 06-MAY-2004 (first entry)
XX
DE Base containing SSR sequence #17.
XX
XX rice variety; amplification genetic marker; db.
XX
XX Oryza sp.
XX
XX JP2003319782-A.
XX
XX 11-NOV-2003.
XX
XX 02-MAY-2002; 2002JP-00130645.
XX
XX 02-MAY-2002; 2002JP-00130645.
XX
XX (HOKU-) HOKUREN NOGYO KYODO KUMITAI.
XX
XX (HOKK-) HOKKAIDO GREEN BIO KENKYUSHO KK.
XX
XX WPI; 2004-003560/01.
XX
XX Identifying rice variety using base sequence containing SSR sequence and
XX PT amplifying genetic marker.
XX
XX Claim 65; SEQ ID NO 17; 30bp; Japanese.
XX
XX The present invention relates to identifying a rice variety as
XX amplification genetic marker and identifying whether test rice variety is
XX any one of the 32 rice varieties e.g., Kasalath, breath which came or
XX Hayanagari, Italic Livorno, Dungan Shail, Aroz Da Terra, Fany, USSR22,
XX Nihonbare. The method is useful for identifying rice variety and
XX identifies excellent rice variety. The present sequence represents a base
XX - containing SSR sequence of the invention.
XX
XX Sequence 22 BP; 11 A; 0 C; 11 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 17.8; DB 1; Length 22;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1180 AGAGAAAGAGAGAGAGAAA 1200
DB 1 AGAGAGAGAGAGAGAGAGA 21

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RESULT:265
AAQ33511
ID AAQ33511 standard; DNA; 23 BP.
XX
XX AAQ33511;
XX
XX 25-MAR-2003 (revised)
XX 02-FEB-1993 (first entry)
XX
DE Sequence of microsatellite from clone AGLA209.
XX
XX PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
XX genetic mapping; traits; amplification; ss.
XX
XX Bos taurus.
XX
XX WO92313102-A1.
XX
XX 06-AUG-1992.
XX
XX 15-JAN-1992; 92MO-US000340.
XX
XX 15-JAN-1991; 91US-00642342.
XX
XX (GENM-) GENMARK.
XX
XX Georges M, Massey JM;
XX
XX WPI; 1992-284684/34.
XX
XX Polymorphic bovine DNA markers - used in genetic identification, gene
XX PT mapping, and selective breeding.
XX
XX Table 7; Page 132; 517pp; English.
XX
XX The sequence is that of a bovine microsatellite sequence obtd. by
XX screening a genomic library of bovine MboI DNA fragments of between 250
XX and 500 bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of
XX 50 clones cross-hybridised. Assuming independent distribution of
XX microsatellites and MboI sites, the frequency of (76)n >9 microsatellites
XX in the bovine genome is estimated at >100,000. The sequence information
XX for ca. 230 such bovine microsatellites is summarised in the
XX specification and indexed herein (see below). The sequences upstream and
XX downstream of the microsatellite sequence were used to generate the
XX required PCR primers for in vitro amplification of the corresp.
XX microsatellite (using the program OPTIPRIM). The microsatellites may be
XX used to identify individuals, for parentage testing, and in the genetic
XX mapping of economic trait loci, or genes involved in the determination of
XX economically important traits esp. in cattle, to allow selective
XX breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN
XX field.)
XX
XX Sequence 23 BP; 12 A; 0 C; 11 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 17.8; DB 1; Length 23;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1180 AGAGAAAGAGAGAGAGAAA 1200
DB 1 AGAGAGAGAGAGAGAGAGA 21
XX
RESULT 266
AAK00525/c
ID AAK00525 standard; DNA; 24 BP.
XX
XX AAK00525;
XX
XX 30-MAR-1999 (first entry)
XX
XX Antisense oligonucleotide for poly-purine target sequence.
DE

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```
XX Target; antisense; selective rank; inhibition; ranking; stability;
KW interaction; ss.
XX
XX Synthetic.
XX
XX US5856103-A.
XX
XX 05-JAN-1999.
XX
XX 03-MAR-1997; 97US-00808474.
XX
XX 07-OCT-1994; 94US-00320507.
XX
XX (TEXA ) UNIV TEXAS.
XX
XX Clark CL, Gray DM;
XX
XX WPI; 1999-105098/09.
XX
XX Selectively ranking nucleic acid molecules, for inhibitory efficiency -
XX comprises determining the fraction a set of nearest-neighbour nucleic
XX acid base pair types in a target sequence zone, substituting nearest-
XX neighbour nucleic acid base pair fractions to determine the fractions and
XX multiplying.
XX
XX Disclosure; Col 13-14; 72pp; English.
XX
XX This oligonucleotide represents an antisense oligonucleotides (ASO)
XX targeted to a poly-purine mRNA sequence generated by a method of
XX selectively ranking nucleic acid molecules for inhibitory efficiency. The
XX method comprises: (a) determining the fraction of each of a set of 13
XX nearest-neighbour nucleic acid base pair types in a target sequence zone
XX RNA:ASO-DNA hybrid nucleic acid sequence; (b) substituting nearest-
XX neighbour nucleic acid base pair fractions into formulas to determine the
XX fractions of each of a series of 13 nearest-neighbour nucleic acid base
XX pair types to provide determined fractions; and (c) multiplying the
XX fractions of the 13 nearest-neighbour nucleic acid base pair types by a
XX stability ranking to the nucleic acid antisense sequence; where the
XX results are ordered to produce a ranking. The process is used to rank
XX nucleic acid sequences based on the stability of nucleic acid oligomer
XX binding interactions to select sequence zones for antisense targeting
XX
XX
XX Sequence 24 BP; 0 A; 12 C; 0 G; 12 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 17.8; DB 1; Length 24;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1180 AGAGAAAGAGAGAGAGAGAA 1200
DB 24 AGAGAGAGAGAGAGAGAGAGA 4
RESULT 267
AAK00527
ID AAK00527 standard; DNA; 24 BP.
XX
XX AAK00527;
AC
XX 30-MAR-1999 (first entry)
DT
XX Antisense oligonucleotide for poly-pyrimidine target sequence.
DE
XX Target; antisense; selective rank; inhibition; ranking; stability;
KW interaction; ss.
XX
XX Synthetic.
XX
XX US5856103-A.
XX
XX 05-JAN-1999.
XX
```

```
PF 03-MAR-1997; 97US-00808474.
XX
XX 07-OCT-1994; 94US-00320507.
XX
XX (TEXA ) UNIV TEXAS.
XX
XX Clark CL, Gray DM;
XX
XX WPI; 1999-105098/09.
XX
XX Selectively ranking nucleic acid molecules, for inhibitory efficiency -
XX comprises determining the fraction a set of nearest-neighbour nucleic
XX acid base pair types in a target sequence zone, substituting nearest-
XX neighbour nucleic acid base pair fractions to determine the fractions and
XX multiplying.
XX
XX Disclosure; Col 13-14; 72pp; English.
XX
XX This oligonucleotide represents an antisense oligonucleotides (ASO)
XX targeted to a poly-pyrimidine mRNA sequence generated by a method of
XX selectively ranking nucleic acid molecules for inhibitory efficiency. The
XX method comprises: (a) determining the fraction of each of a set of 13
XX nearest-neighbour nucleic acid base pair types in a target sequence zone
XX RNA:ASO-DNA hybrid nucleic acid sequence; (b) substituting nearest-
XX neighbour nucleic acid base pair fractions into formulas to determine the
XX fractions of each of a series of 13 nearest-neighbour nucleic acid base
XX pair types to provide determined fractions; and (c) multiplying the
XX fractions of the 13 nearest-neighbour nucleic acid base pair types by a
XX stability ranking to the nucleic acid antisense sequence; where the
XX results are ordered to produce a ranking. The process is used to rank
XX nucleic acid sequences based on the stability of nucleic acid oligomer
XX binding interactions to select sequence zones for antisense targeting
XX
XX
XX Sequence 24 BP; 12 A; 0 C; 12 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 17.8; DB 1; Length 24;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1180 AGAGAAAGAGAGAGAGAGAA 1200
DB 2 AGAGAGAGAGAGAGAGAGAGA 22
RESULT 268
AAK00524
ID AAK00524 standard; mRNA; 24 BP.
XX
XX AAK00524;
AC
XX 30-MAR-1999 (first entry)
DT
XX Target sequence #2 for antisense oligonucleotides.
DE
XX Target; antisense; selective rank; inhibition; ranking; stability;
KW interaction; ss.
XX
XX Synthetic.
XX
XX US5856103-A.
XX
XX 05-JAN-1999.
XX
XX 03-MAR-1997; 97US-00808474.
XX
XX 07-OCT-1994; 94US-00320507.
XX
XX (TEXA ) UNIV TEXAS.
XX
XX Clark CL, Gray DM;
XX
XX WPI; 1999-105098/09.
XX
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PT Selectively ranking nucleic acid molecules, for inhibitory efficiency -
PT comprises determining the fraction of a set of 13 nearest-neighbour nucleic
PT acid base pair types in a target sequence zone, substituting nearest-
PT neighbour nucleic acid base pair fractions to determine the fractions and
PT multiplying.
XX
PS Disclosure; Col 13-14; 72pp; English.
XX
CC This sequence represents a target mRNA for the generation of antisense
CC oligonucleotides (ASO) in a method of selectively ranking nucleic acid
CC molecules for inhibitory efficiency. The method comprises: (a)
CC determining the fraction of each of a set of 13 nearest-neighbour nucleic
CC acid base pair types in a target sequence zone RNA:ASO-DNA hybrid nucleic
CC acid sequence; (b) substituting nearest-neighbour nucleic acid base pair
CC fractions into formulas to determine the fractions of each of a series of
CC 13 nearest-neighbour nucleic acid base pair types to provide determined
CC fractions; and (c) multiplying the fractions of the 13 nearest-neighbour
CC nucleic acid base pair types by a stability ranking to the nucleic acid
CC antisense sequence; where the results are ordered to produce a ranking.
CC The process is used to rank nucleic acid sequences based on the stability
CC of nucleic acid oligomer binding interactions to select sequence zones
CC for antisense targeting
XX
SQ Sequence 24 BP; 12 A; 0 C; 12 G; 0 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.8; DB 1; Length 24;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1180 AGAGAAAGAGAGAGAGAGAA 1200
DB 1 AGAGAGAGAGAGAGAGAGAGA 21
RESULT 269
AA00526/c
ID AA00526 standard; mRNA; 24 BP.
XX
AC AA00526;
XX
DT 30-MAR-1999 (first entry)
XX
DE Poly-pyrimidine target sequence for antisense oligonucleotides.
XX
KM Target; antisense; selective rank; inhibition; ranking; stability;
XX interaction; ss.
XX
OS Synthetic.
XX
PN US5856103-A.
XX
PD 05-JAN-1999.
XX
PF 03-MAR-1997; 97US-00808474.
XX
PR 07-OCT-1994; 94US-00320507.
XX
PA (TEXA) UNIV TEXAS.
XX
PI Clark CL, Gray DM;
XX
DR WPI; 1999-105098/09.
XX
XX Selectively ranking nucleic acid molecules, for inhibitory efficiency -
PT comprises determining the fraction of a set of nearest-neighbour nucleic
PT acid base pair types in a target sequence zone, substituting nearest-
PT neighbour nucleic acid base pair fractions to determine the fractions and
PT multiplying.
XX
PS Disclosure; Col 13-14; 72pp; English.
XX
CC This sequence represents a target mRNA for the generation of antisense
CC oligonucleotides (ASO) in a method of selectively ranking nucleic acid

CC molecules for inhibitory efficiency. The method comprises: (a)
CC determining the fraction of each of a set of 13 nearest-neighbour nucleic
CC acid base pair types in a target sequence zone RNA:ASO-DNA hybrid nucleic
CC acid sequence; (b) substituting nearest-neighbour nucleic acid base pair
CC fractions into formulas to determine the fractions of each of a series of
CC 13 nearest-neighbour nucleic acid base pair types to provide determined
CC fractions; and (c) multiplying the fractions of the 13 nearest-neighbour
CC nucleic acid base pair types by a stability ranking to the nucleic acid
CC antisense sequence; where the results are ordered to produce a ranking.
CC The process is used to rank nucleic acid sequences based on the stability
CC of nucleic acid oligomer binding interactions to select sequence zones
CC for antisense targeting
XX
SQ Sequence 24 BP; 0 A; 12 C; 0 G; 0 T; 12 U; 0 Other;
Query Match 0.3%; Score 17.8; DB 1; Length 24;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1180 AGAGAAAGAGAGAGAGAGAA 1200
DB 23 AGAGAGAGAGAGAGAGAGAGA 3
RESULT 270
AAF57997
ID AAF57997 standard; DNA; 24 BP.
XX
AC AAF57997;
XX
DT 26-APR-2001 (first entry)
XX
DE Nucleic acid triplex DNA sequence #2.
XX
KM Hoogsteen-paired duplex; Watson-Crick pairing; triplex;
XX antisense therapy; gene expression control; transcription; ss.
XX
OS Synthetic.
XX
PN WO200105937-A2.
XX
PD 25-JAN-2001.
XX
PF 20-JUL-2000; 2000WO-US019783.
XX
PR 20-JUL-1999; 99US-00357424.
XX
PR 19-JAN-2000; 2000US-00487130.
XX
PA (TEXA) UNIV TEXAS.
XX
PI Gray DM, Hashem GM;
XX
DR WPI; 2001-159523/16.
XX
PT RNAsteriskDNA pyrimidinesteriskpurine duplex for use as an antisense
PT molecule, by heating a triplex to dissociate a Watson-Crick paired
PT pyrimidine strand.
XX
PS Example 1; Page 9; 23pp; English.
XX
CC The present invention describes a method for producing a nucleic acid
CC molecule comprising a Hoogsteen-paired RNA:DNA duplex capable of being
CC used as an antisense molecule and capable of recognising an RNA sequence
CC to form a triplex. This involves Watson-Crick pairing. This is useful in
CC antisense therapy, as it controls gene expression by causing
CC transcription to be prevented. The present sequence is an example of a
CC triplex sequence used in the methods of the invention
XX
SQ Sequence 24 BP; 12 A; 0 C; 12 G; 0 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.8; DB 1; Length 24;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;

```
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY      1180 AGGAAAGAGAGAGAGAAA 1200
      ||||| ||||| ||||| |||||
      1 AGAGAGAGAGAGAGAGAGA 21
Db

RESULT 271
AAFS7998/c
ID AAF57998 standard; DNA; 24 BP.
XX
XX AAF57998;
XX
XX 26-APR-2001 (first entry)
XX
XX Nucleic acid triplex DNA sequence #3.
XX
XX Hoogsteen-paired duplex; Watson-Crick pairing; triplex;
XX antisense therapy; gene expression control; transcription; ss.
XX
XX Synthetic.
XX
XX WO200105937-A2.
XX
XX 25-JAN-2001.
XX
XX 20-JUL-2000; 2000WO-US019783.
XX
XX 20-JUL-1999; 99US-00357424.
XX
XX 19-JAN-2000; 2000US-00487130.
XX
XX (TEXA ) UNIV TEXAS.
XX
XX Gray DM, Hashem GM;
XX
XX WPI; 2001-159523/16.
XX
XX Generating nucleic acid molecule comprising Hoogsteen-paired
XX PT RNAasteriskDNA pyrimidineasteriskpurine duplex for use as an antisense
XX PT molecule, by heating a triplex to dissociate a Watson-Crick paired
XX PT pyrimidine strand.
XX
XX Example 1; Page 9; 23pp; English.
XX
XX The present invention describes a method for producing a nucleic acid
XX CC molecule comprising a Hoogsteen-paired RNA:DNA duplex capable of being
XX CC used as an antisense molecule and capable of recognising an RNA sequence
XX CC to form a triplex. This involves Watson-Crick pairing. This is useful in
XX CC antisense therapy, as it controls gene expression by causing
XX CC transcription to be prevented. The present sequence is an example of a
XX CC triplex sequence used in the methods of the invention
XX
XX Sequence 24 BP; 0 A; 12 C; 0 G; 12 T; 0 U; 0 Other;
SQ

Query Match 0.3%; Score 17.8; DB 1; Length 24;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY      1180 AGGAAAGAGAGAGAGAAA 1200
      ||||| ||||| ||||| |||||
      24 AGAGAGAGAGAGAGAGAGA 4
Db

RESULT 272
AAFS7999/c
ID AAF57999 standard; RNA; 24 BP.
XX
XX AAF57999;
XX
XX 26-APR-2001 (first entry)
XX
XX Nucleic acid triplex RNA sequence #1.
XX
```

```
KW Hoogsteen-paired duplex; Watson-Crick pairing; triplex;
KW antisense therapy; gene expression control; transcription; ss.
XX
XX Synthetic.
XX
XX WO200105937-A2.
XX
XX 25-JAN-2001.
XX
XX 20-JUL-2000; 2000WO-US019783.
XX
XX 20-JUL-1999; 99US-00357424.
XX
XX 19-JAN-2000; 2000US-00487130.
XX
XX (TEXA ) UNIV TEXAS.
XX
XX Gray DM, Hashem GM;
XX
XX WPI; 2001-159523/16.
XX
XX Generating nucleic acid molecule comprising Hoogsteen-paired
XX PT RNAasteriskDNA pyrimidineasteriskpurine duplex for use as an antisense
XX PT molecule, by heating a triplex to dissociate a Watson-Crick paired
XX PT pyrimidine strand.
XX
XX Claim 14; Page 17; 23pp; English.
XX
XX The present invention describes a method for producing a nucleic acid
XX CC molecule comprising a Hoogsteen-paired RNA:DNA duplex capable of being
XX CC used as an antisense molecule and capable of recognising an RNA sequence
XX CC to form a triplex. This involves Watson-Crick pairing. This is useful in
XX CC antisense therapy, as it controls gene expression by causing
XX CC transcription to be prevented. The present sequence is an example of a
XX CC triplex sequence used in the methods of the invention
XX
XX Sequence 24 BP; 0 A; 12 C; 0 G; 0 T; 12 U; 0 Other;
SQ

Query Match 0.3%; Score 17.8; DB 1; Length 24;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY      1180 AGGAAAGAGAGAGAGAAA 1200
      ||||| ||||| ||||| |||||
      24 AGAGAGAGAGAGAGAGAGA 4
Db

RESULT 273
AAFS8000
ID AAF58000 standard; DNA; 24 BP.
XX
XX AAF58000;
XX
XX 26-APR-2001 (first entry)
XX
XX Nucleic acid triplex DNA sequence #4.
XX
XX Hoogsteen-paired duplex; Watson-Crick pairing; triplex;
XX KW antisense therapy; gene expression control; transcription; ss.
XX
XX Synthetic.
XX
XX WO200105937-A2.
XX
XX 25-JAN-2001.
XX
XX 20-JUL-2000; 2000WO-US019783.
XX
XX 20-JUL-1999; 99US-00357424.
XX
XX 19-JAN-2000; 2000US-00487130.
XX
XX (TEXA ) UNIV TEXAS.
XX
XX Gray DM, Hashem GM;
XX
XX
```

XX WPI; 2001-159523/16.
XX
XX
XX Generating nucleic acid molecule comprising Hoogsteen-paired
PT RNAaeteriskDNA pyrimidinaesteriskpurine duplex for use as an antisense
PT molecule, by heating a triplex to dissociate a Watson-Crick paired
PT pyrimidine strand.
XX
XX
XX Claim 14; Page 17; 23pp; English.
XX
XX The present invention describes a method for producing a nucleic acid
CC molecule comprising a Hoogsteen-paired RNA:DNA duplex capable of being
CC used as an antisense molecule and capable of recognising an RNA sequence
CC to form a triplex. This involves Watson-Crick pairing. This is useful in
CC antisense therapy, as it controls gene expression by causing
CC transcription to be prevented. The present sequence is an example of a
CC triplex sequence used in the methods of the invention
XX
SQ Sequence 24 BP; 12 A; 0 C; 12 G; 0 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.8; DB 1; Length 24;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1180 AGAGAAAGAGAGAGAGAGAA 1200
DB 1 AGAGAGAGAGAGAGAGAGAGA 21

RESULT 274
AAFS7996/c
ID AAF57996 standard; DNA; 24 BP.
XX
XX AAF57996;
XX
XX 26-APR-2001 (First entry)
XX
XX
XX Nucleic acid triplex DNA sequence #1.
XX
XX Hoogsteen-paired duplex; Watson-Crick pairing; triplex;
KW antisense therapy; gene expression control; transcription; ss.
XX
XX Synthetic.
XX
XX WO200105937-A2.
XX
XX 25-JAN-2001.
XX
XX 20-JUL-2000; 2000MO-US019783.
XX
XX 20-JUL-1999; 99US-00357424.
PR 19-JAN-2000; 2000US-00487130.
XX
XX (TEXA) UNIV TEXAS.
XX
XX Gray DM, Hashem GM;
XX
XX WPI; 2001-159523/16.
XX
XX
XX Generating nucleic acid molecule comprising Hoogsteen-paired
PT RNAaeteriskDNA pyrimidinaesteriskpurine duplex for use as an antisense
PT molecule, by heating a triplex to dissociate a Watson-Crick paired
PT pyrimidine strand.
XX
XX Example 1; Page 9; 23pp; English.
XX
XX The present invention describes a method for producing a nucleic acid
CC molecule comprising a Hoogsteen-paired RNA:DNA duplex capable of being
CC used as an antisense molecule and capable of recognising an RNA sequence
CC to form a triplex. This involves Watson-Crick pairing. This is useful in
CC antisense therapy, as it controls gene expression by causing
CC transcription to be prevented. The present sequence is an example of a
CC triplex sequence used in the methods of the invention

XX
SQ Sequence 24 BP; 0 A; 12 C; 0 G; 12 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.8; DB 1; Length 24;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1180 AGAGAAAGAGAGAGAGAGAA 1200
DB 24 AGAGAGAGAGAGAGAGAGAGA 4

RESULT 275
AAFS8001/c
ID AAF58001 standard; RNA; 24 BP.
XX
XX AAF58001;
XX
XX 26-APR-2001 (First entry)
XX
XX
XX Nucleic acid triplex RNA sequence #2.
XX
XX Hoogsteen-paired duplex; Watson-Crick pairing; triplex;
KW antisense therapy; gene expression control; transcription; ss.
XX
XX Synthetic.
XX
XX WO200105937-A2.
XX
XX 25-JAN-2001.
XX
XX 20-JUL-2000; 2000MO-US019783.
XX
XX 20-JUL-1999; 99US-00357424.
PR 19-JAN-2000; 2000US-00487130.
XX
XX (TEXA) UNIV TEXAS.
XX
XX Gray DM, Hashem GM;
XX
XX WPI; 2001-159523/16.
XX
XX
XX Generating nucleic acid molecule comprising Hoogsteen-paired
PT RNAaeteriskDNA pyrimidinaesteriskpurine duplex for use as an antisense
PT molecule, by heating a triplex to dissociate a Watson-Crick paired
PT pyrimidine strand.
XX
XX Claim 14; Page 17; 23pp; English.
XX
XX The present invention describes a method for producing a nucleic acid
CC molecule comprising a Hoogsteen-paired RNA:DNA duplex capable of being
CC used as an antisense molecule and capable of recognising an RNA sequence
CC to form a triplex. This involves Watson-Crick pairing. This is useful in
CC antisense therapy, as it controls gene expression by causing
CC transcription to be prevented. The present sequence is an example of a
CC triplex sequence used in the methods of the invention
XX
SQ Sequence 24 BP; 0 A; 12 C; 0 G; 1 T; 11 U; 0 Other;

Query Match 0.3%; Score 17.8; DB 1; Length 24;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1180 AGAGAAAGAGAGAGAGAGAA 1200
DB 24 AGAGAGAGAGAGAGAGAGAGA 4

RESULT 276
AAFS7781
ID AAF87781 standard; mRNA; 24 BP.
XX
XX AAF87781;
AC

XX 11-JUL-2001 (first entry)
XX Hybrid mRNA sequence SEQ ID NO:8.
XX
XX Antisense DNA oligomer; ASO; identification; gene therapy; target;
XX Nearest-Neighbour Thermal Stability Program; thermal melting temperature;
XX phosphorothioate; disease treatment; DNA:RNA hybrid; ss.
XX
XX Synthetic.
XX
XX US6183966-B1.
XX
XX 06-FEB-2001.
XX
XX 22-JAN-1999; 99US-00235614.
XX
XX 07-OCT-1994; 94US-00320507.
XX 03-MAR-1997; 97US-00808474.
XX
XX (TEXA) UNIV TEXAS SYSTEM.
XX
XX Gray DM, Clark CL;
XX WPI, 2001-280429/29.
XX
XX Identifying a nucleic acid having a sequence capable of targeting a gene
XX of interest, for identifying nucleic acids for gene therapy, comprises
XX using the Nearest-Neighbor Thermal Stability Program.
XX
XX Disclosure, Col 14; 43pp; English.
XX
XX The present invention describes a method for the identification of a
XX nucleic acid having a sequence capable of targeting a gene of interest
XX comprises: (a) a first database having a list of stability values for
XX independent combinations of N(x); (b) a computing unit having a means for
XX inputting data comprising N(x); data list, defining a nucleic acid
XX sequence of interest to be targeted to provide a second database; and (c)
XX a program capable of processing the first and second database to N(x)
XX comparison, and a stability value of a nucleic acid sequence capable of
XX targeting the gene of interest. The method is useful for identifying a
XX nucleic acid having a sequence capable of targeting a gene of interest.
XX These nucleic acids are useful in gene therapy and disease treatment. The
XX method may be used to obtain thermodynamic parameters for 20 combinations
XX of nearest-neighbor base pairs of DNA:RNA hybrid sequences. The Nearest-
XX Neighbour Thermal Stability Program can process data for use in
XX calculating thermal melting temperatures for phosphorothioate DNA:RNA
XX hybrids. The program can be readily extended to predict the most stable
XX triplex-forming sequences, or antigenic oligomers. The present sequence
XX represents a hybrid mRNA sequence which is used in the exemplification of
XX the present invention
SQ Sequence 24 BP; 12 A; 0 C; 12 G; 0 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.8; DB 1; Length 24;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1180 AGAGAAAGAGAGAGAGAA 1200
Db 1 AGAGAGAGAGAGAGAGAGAGA 21
RESULT 277
AAF87784
ID AAF87784 standard; DNA; 24 BP.
XX
XX AAF87784;
XX
XX 11-JUL-2001 (first entry)
XX
XX Hybrid DNA sequence SEQ ID NO:11.
XX

KW Antisense DNA oligomer; ASO; identification; gene therapy; target;
KW Nearest-Neighbour Thermal Stability Program; thermal melting temperature;
KW phosphorothioate; disease treatment; DNA:RNA hybrid; ss.
XX
XX Synthetic.
XX
XX US6183966-B1.
XX
XX 06-FEB-2001.
XX
XX 22-JAN-1999; 99US-00235614.
XX
XX 07-OCT-1994; 94US-00320507.
XX 03-MAR-1997; 97US-00808474.
XX
XX (TEXA) UNIV TEXAS SYSTEM.
XX
XX Gray DM, Clark CL;
XX WPI, 2001-280429/29.
XX
XX Identifying a nucleic acid having a sequence capable of targeting a gene
XX of interest, for identifying nucleic acids for gene therapy, comprises
XX using the Nearest-Neighbor Thermal Stability Program.
XX
XX Disclosure, Col 15; 43pp; English.
XX
XX The present invention describes a method for the identification of a
XX nucleic acid having a sequence capable of targeting a gene of interest
XX comprises: (a) a first database having a list of stability values for
XX independent combinations of N(x); (b) a computing unit having a means for
XX inputting data comprising N(x); data list, defining a nucleic acid
XX sequence of interest to be targeted to provide a second database; and (c)
XX a program capable of processing the first and second database to N(x)
XX comparison, and a stability value of a nucleic acid sequence capable of
XX targeting the gene of interest. The method is useful for identifying a
XX nucleic acid having a sequence capable of targeting a gene of interest.
XX These nucleic acids are useful in gene therapy and disease treatment. The
XX method may be used to obtain thermodynamic parameters for 20 combinations
XX of nearest-neighbor base pairs of DNA:RNA hybrid sequences. The Nearest-
XX Neighbour Thermal Stability Program can process data for use in
XX calculating thermal melting temperatures for phosphorothioate DNA:RNA
XX hybrids. The program can be readily extended to predict the most stable
XX triplex-forming sequences, or antigenic oligomers. The present sequence
XX represents a hybrid DNA sequence which is used in the exemplification of
XX the present invention
SQ Sequence 24 BP; 12 A; 0 C; 12 G; 0 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.8; DB 1; Length 24;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1180 AGAGAAAGAGAGAGAGAA 1200
Db 2 AGAGAGAGAGAGAGAGAGAGA 22
RESULT 278
AAF87783/C
ID AAF87783 standard; mRNA; 24 BP.
XX
XX AAF87783;
XX
XX 11-JUL-2001 (first entry)
XX
XX Hybrid mRNA sequence SEQ ID NO:10.
XX
XX Antisense DNA oligomer; ASO; identification; gene therapy; target;
XX Nearest-Neighbour Thermal Stability Program; thermal melting temperature;
XX phosphorothioate; disease treatment; DNA:RNA hybrid; ss.
XX
XX Synthetic.
OS


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XX  US6183966-B1.
PN
XX
XX  06-FEB-2001.
PD
XX
XX  22-JAN-1999; 99US-00235614.
PF
XX
XX  07-OCT-1994; 94US-00320507.
PR
XX  03-MAR-1997; 97US-00808474.
PA
XX  (TEXA ) UNIV TEXAS SYSTEM.
PI
XX  Gray DM, Clark CL;
XX  WPI; 2001-280429/29.
DR
XX
XX  Identifying a nucleic acid having a sequence capable of targeting a gene
PT of interest, for identifying nucleic acids for gene therapy, comprises
PT using the Nearest-Neighbor Thermal Stability Program.
XX
XX  Disclosure; Col 15; 43pp; English.
PS
XX
XX  The present invention describes a method for the identification of a
XX nucleic acid having a sequence capable of targeting a gene of interest
XX comprises: (a) a first database having a list of stability values for
XX independent combinations of N(x); (b) a computing unit having a means for
XX inputting data comprising N(x), data list, defining a nucleic acid
XX sequence of interest to be targeted to provide a second database; and (c)
XX a program capable of processing the first and second database to N(x)
XX comparison, and a stability value of a nucleic acid sequence capable of
XX targeting the gene of interest. The method is useful for identifying a
XX nucleic acid having a sequence capable of targeting a gene of interest.
XX These nucleic acids are useful in gene therapy and disease treatment. The
XX method may be used to obtain thermodynamic parameters for 20 combinations
XX of nearest-neighbor base pairs of DNA:RNA hybrid sequences. The Nearest-
XX Neighbor Thermal Stability Program can process data for use in
XX calculating thermal melting temperatures for phosphorothioate DNA:RNA
XX hybrids. The program can be readily extended to predict the most stable
XX triplex-forming sequences, or antigenic oligomers. The present sequence
XX represents a hybrid mRNA sequence which is used in the exemplification of
XX the present invention.
SQ
XX
XX  Sequence 24 BP; 0 A; 12 C; 0 G; 12 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.8; DB 1; Length 24;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1180 AGAGAAAGAGAGAGAGAAA 1200
DB 23 AGAGAGAGAGAGAGAGAGAGA 3
RESULT 279
AAF87782/c
ID AAF87782 standard; DNA; 24 BP.
XX
XX  AAF87782;
AC
XX
XX  11-JUL-2001 (first entry)
DT
XX
XX  Hybrid DNA sequence SEQ ID NO:9.
DE
XX
XX  Antisense DNA oligomer; ASO; identification; gene therapy; target;
XX Nearest-Neighbor Thermal Stability Program; thermal melting temperature;
XX phosphorothioate; disease treatment; DNA:RNA hybrid; ss.
XX
XX  Synthetic.
OS
XX  US6183966-B1.
XX
XX  06-FEB-2001.
PD
XX

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PF  22-JAN-1999; 99US-00235614.
XX
XX  07-OCT-1994; 94US-00320507.
PR
XX  03-MAR-1997; 97US-00808474.
PA
XX  (TEXA ) UNIV TEXAS SYSTEM.
PI
XX  Gray DM, Clark CL;
XX  WPI; 2001-280429/29.
DR
XX
XX  Identifying a nucleic acid having a sequence capable of targeting a gene
PT of interest, for identifying nucleic acids for gene therapy, comprises
PT using the Nearest-Neighbor Thermal Stability Program.
XX
XX  Disclosure; Col 14; 43pp; English.
PS
XX
XX  The present invention describes a method for the identification of a
XX nucleic acid having a sequence capable of targeting a gene of interest
XX comprises: (a) a first database having a list of stability values for
XX independent combinations of N(x); (b) a computing unit having a means for
XX inputting data comprising N(x), data list, defining a nucleic acid
XX sequence of interest to be targeted to provide a second database; and (c)
XX a program capable of processing the first and second database to N(x)
XX comparison, and a stability value of a nucleic acid sequence capable of
XX targeting the gene of interest. The method is useful for identifying a
XX nucleic acid having a sequence capable of targeting a gene of interest.
XX These nucleic acids are useful in gene therapy and disease treatment. The
XX method may be used to obtain thermodynamic parameters for 20 combinations
XX of nearest-neighbor base pairs of DNA:RNA hybrid sequences. The Nearest-
XX Neighbor Thermal Stability Program can process data for use in
XX calculating thermal melting temperatures for phosphorothioate DNA:RNA
XX hybrids. The program can be readily extended to predict the most stable
XX triplex-forming sequences, or antigenic oligomers. The present sequence
XX represents a hybrid DNA sequence which is used in the exemplification of
XX the present invention.
SQ
XX
XX  Sequence 24 BP; 0 A; 12 C; 0 G; 12 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.8; DB 1; Length 24;
Best Local Similarity 90.5%; Pred. No. 4.1e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 1180 AGAGAAAGAGAGAGAGAAA 1200
DB 24 AGAGAGAGAGAGAGAGAGAGA 4
RESULT 280
AAQ33955
ID AAQ33955 standard; DNA; 25 BP.
XX
XX  AAQ33955;
AC
XX
XX  25-MAR-2003 (revised)
DT
XX  02-FEB-1993 (first entry)
DE
XX
XX  Sequence upstream from a microsatellite from clone TGLA351.
XX PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
XX Genetic mapping; traits; amplification; ss.
XX
XX  Bos taurus.
OS
XX  WO9213102-A1.
XX
XX  06-AUG-1992.
PD
XX
XX  15-JAN-1992; 92WO-US000340.
PF
XX  15-JAN-1991; 91US-00642342.
PR
XX
XX  (GENM-) GENMARK.
PA

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XX Georges M, Massey JM;
PI
XX
XX WPI, 1992-284684/34.
DR
XX
XX Polymorphic bovine DNA markers - used in genetic identification, gene
PT mapping, and selective breeding.
PT
XX
XX Table 7, Page 312, 517pp; English.
PS
XX
XX The sequence is upstream of a bovine microsatellite sequence obid. by
CC screening a library of bovine Mbol DNA fragments of between 250 and 500
CC bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50
CC clones cross-hybridised. Assuming independent distribution of
CC microsatellites and Mbol sites, the frequency of (76)n >9 microsatellites
CC in the bovine genome is estimated at >100, 000. The sequence information
CC for ca. 230 such bovine microsatellites is summarised in the
CC specification and indexed herein (see below). The sequences upstream and
CC downstream of the microsatellite sequence were used to generate the
CC required PCR primers for in vitro amplification of the corresp.
CC microsatellite (using the program OPRIPRIM). The microsatellites may be
CC used to identify individuals, for parentage testing, and in the genetic
CC mapping of economic trait loci, or genes involved the determination of
CC economically important traits esp. in cattle, to allow selective
CC breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN
CC field.)
XX
SQ Sequence 25 BP, 5 A; 7 C; 7 G; 6 T; 0 U; 0 Other;

Query Match      0.3%; Score 17.8; DB 1; Length 25;
Best Local Similarity 90.5%; Pred. No. 4.2e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      5069 CTCATCTGGTGGCCACAGCAG 5089
Db      2 CACATCTGGTGGCCACATCAG 22

RESULT 281
AAQ33606
ID AAQ33606 standard; DNA; 25 BP.
XX
XX AAQ33606;
AC
XX
XX 25-MAR-2003 (revised)
DT 02-FEB-1993 (first entry)
XX
XX Microsatellite sequence from clone AGLA298.
DE
XX
XX PCR; selection; primers; OPRIPRIM; breeding; cattle; parentage;
KW genetic mapping; traits; amplification; ss.
XX
XX Bos taurus.
OS
XX
XX WO9213102-A1.
PN
XX
XX 06-AUG-1992.
PD
XX
XX 15-JAN-1992; 92WO-US000340.
PF
XX
XX 15-JAN-1991; 91US-00642342.
PR
XX
XX (GENM-) GENMARK.
PA
XX
XX Georges M, Massey JM;
PI
XX
XX WPI, 1992-284684/34.
DR
XX
XX Polymorphic bovine DNA markers - used in genetic identification, gene
PT mapping, and selective breeding.
PT
XX
XX Table 7, Page 172, 517pp; English.
XX

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```

CC The sequence is that of a bovine microsatellite sequence obid. by
CC screening a library of bovine Mbol DNA fragments of between 250 and 500
CC bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50
CC clones cross-hybridised. Assuming independent distribution of
CC microsatellites and Mbol sites, the frequency of (76)n >9 microsatellites
CC in the bovine genome is estimated at >100, 000. The sequence information
CC for ca. 230 such bovine microsatellites is summarised in the
CC specification and indexed herein (see below). The sequences upstream and
CC downstream of the microsatellite sequence were used to generate the
CC required PCR primers for in vitro amplification of the corresp.
CC microsatellite (using the program OPRIPRIM). The microsatellites may be
CC used to identify individuals, for parentage testing, and in the genetic
CC mapping of economic trait loci, or genes involved the determination of
CC economically important traits esp. in cattle, to allow selective
CC breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN
CC field.)
XX
SQ Sequence 25 BP, 13 A; 1 C; 11 G; 0 T; 0 U; 0 Other;

Query Match      0.3%; Score 17.8; DB 1; Length 25;
Best Local Similarity 90.5%; Pred. No. 4.2e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1180 AGAGAAAGAGAGAGAGAAA 1200
Db      3 AGAGACGAGAGAGAGAGAGA 23

RESULT 282
ACH61516/C
ID ACH61516 standard; DNA; 25 BP.
XX
XX ACH61516;
AC
XX
XX 17-OCT-2003 (first entry)
DT
XX
XX DNA target sequence #10652 useful in array for genetic analyses.
DE
XX
XX Gene expression analysis; array; hybridisation; genetic variation;
KW tag-labelled compound; gene family; in situ hybridisation;
KW library screening; Southern hybridisation; northern hybridisation;
KW dot-blot hybridisation; gene sequence; mutation detection;
KW target sequence; probe; PCR; primer; ss.
XX
XX Unidentified.
OS
XX
XX US2003082596-A1.
PN
XX
XX 01-MAY-2003.
PD
XX
XX 08-AUG-2002; 2002US-00215112.
PF
XX
XX 08-AUG-2001; 2001US-0311040P.
PR
XX
XX (MITT/) MITTMANN M.
PA
XX
XX Miltmann M;
PI
XX
XX WPI, 2003-576608/54.
DR
XX
XX New probe array useful e.g. for monitoring gene expression levels, for
PT analyzing genetic variations, or for hybridizing tag-labeled compounds,
PT comprises multiple nucleic acid probes.
PT
XX
XX Claim 1; SEQ ID NO 10652; 9pp; English.
PS
XX
XX The present invention relates to nucleic acid sequences that are
CC complementary to particular genes, and can be used as probes for a
CC variety of analyses such as gene expression analysis. Each probe
CC comprises 9 or more consecutive nucleotides from at least one of 14936
CC nucleotide sequences defined in the patent, or their perfect sense match,
CC gene mismatch, antisense match or antisense mismatch oligonucleotides.
CC The probes may be used in an array comprising at least 10 distinct

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CC nucleic acid probes. The array is useful in monitoring gene expression
CC levels by hybridization to a DNA library, in analysing genetic
CC variations, and in hybridising tag-labelled compounds. The probes are
CC useful for identifying family members of a gene. The probes are also
CC useful in situ hybridisations, in screening cDNA or genomic libraries
CC (or derived subclones) for additional clones containing segments of DNA
CC that have been previously isolated and sequenced. In Southern, northern,
CC or dot-blot hybridisation of genomic DNA to identify or detect the
CC sequence of any gene or detect specific mutations in any gene, and in
CC mapping the 5' terminus of mRNA molecules by primer extensions. The
CC nucleic acid sequences of the invention are also useful as PCR primers.
CC The invention provides a large collection of nucleic acid sequences
CC complementary to particular genes with a wide range of analytical uses.
CC ACH50865-ACH65260 represent the target sequences of the invention. Note:
CC The sequence data for this patent was obtained in electronic format
CC directly from the USPTO web site at seqdata.uspto.gov/patident.htm
SQ Sequence 25 BP; 7 A; 8 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.8; DB 1; Length 25;
Best Local Similarity 90.5%; Pred. No. 4.2e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 926 GGGTTTGAAGACAGCTGCTG 946
DB 21 GGGTTTGAAGACAGCTGCTG 1
RESULT 283
ACF79235/c
ID ACF79235 standard; DNA; 25 BP.
XX ACF79235;
AC ACF79235;
XX 04-DEC-2003 (first entry)
XX Calix(4) arene-oligonucleotide hybrid.
XX Calix(4) arene, triplex; gene therapy; DNA sensor; ss.
XX Synthetic.
XX Key Location/Qualifiers
XX stem_loop 1..25
XX modified_base 13
XX /*tag= a
XX /mod_base= OTHER
XX /note= "OTHER= calix(4) arene nucleoside"
XX MO2003059925-A1.
XX 24-JUL-2003.
XX 19-JUN-2002; 2002MO-KR001160.
XX 15-JAN-2002; 2002KR-00002316.
XX (POST-) POSTECH FOUNDD.
XX Klm BH, Klm SJ,
XX WPI, 2003-627375/59.
XX New calix(4) arene-nucleoside hybrid useful in gene therapy has at least
XX one nucleoside attached to a calix(4) arene group through amide bonding,
XX and is derived from a calix(4) arene having amino groups.
XX Claim 7, Page 20; 16pp; English.
XX The present sequence is that of a calix(4) arene-oligonucleotide hybrid of
CC the invention, which includes a calix(4) arene-nucleoside (preferably
CC thymidine) derivative. The calix(4) arene-oligonucleotide hybrid functions

CC as a DNA hairpin structure mimic. It effectively recognises DNA or RNA
CC through triplex formation by bonding between the calix(4) arene-containing
CC cavity and a biologically active substance. The hybrid has a certain
CC level of both rigidity and flexibility, is stable in vivo, has high cell
CC permeability and can be mass-produced. It can be used as a DNA sensor or
CC for gene therapy
SQ Sequence 25 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 1 Other;
Query Match 0.3%; Score 17.8; DB 1; Length 25;
Best Local Similarity 86.4%; Pred. No. 4.2e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAATATCAAAAGAAAA 5414
DB 22 AAAAATATCAAAAGAAAA 1
RESULT 284
ABZ00511/c
ID ABZ00511 standard; DNA; 50 BP.
XX ABZ00511;
AC ABZ00511;
XX 09-JAN-2003 (first entry)
XX Human leukocyte gene expression profiling probe SEQ ID NO 502.
DE Human leukocyte gene expression profiling; allograft rejection;
XX T7; leukocyte; gene expression profiling; allograft rejection;
XX atherosclerosis; congestive heart failure; systemic lupus erythematosus;
XX rheumatoid arthritis; osteoarthritis; cytomegalovirus; infection; probe;
XX ss.
XX Homo sapiens.
XX WO200257414-A2.
XX 25-JUL-2002.
XX 22-OCT-2001; 2001MO-US047856.
XX 20-OCT-2000; 2000US-0241994P.
XX 08-JUN-2001; 2001US-0296764P.
XX (BIOC-) BIOCARDIA INC.
XX Wohlgenuth J, Fry K, Matcuk G, Altman P, Prentice J, Phillips J;
XX Ly N, Woodward R, Queternous T, Johnson F;
XX WPI, 2002-636525/68.
XX New system for leukocyte expression profiling, diagnosing a disease, or
XX monitoring (the rate of) progression of a disease, e.g. atherosclerosis
XX or congestive heart failure, comprises diagnostic oligonucleotides.
XX Claim 1; Page 341; 0pp; English.
XX The invention relates to a system for detecting gene expression, which
XX comprises one or two isolated DNA molecules that detect expression of a
XX gene, where the gene corresponds to any of 8143 oligonucleotides
XX (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful
XX for leukocyte expression profiling. It is particularly useful for
XX diagnosing a disease, monitoring (rate of) progression of a disease,
XX predicting therapeutic outcome, determining prognosis for a patient,
XX predicting disease complications in an individual or monitoring response
XX to treatment in an individual. The diseases include cardiac allograft
XX rejection, kidney allograft rejection, liver allograft rejection,
XX atherosclerosis, congestive heart failure, systemic lupus erythematosus,
XX rheumatoid arthritis, osteoarthritis or cytomegalovirus infection
SQ Sequence 50 BP; 10 A; 13 C; 14 G; 13 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.8; DB 1; Length 50;

Best Local Similarity 75.9%; Pred. No. 4.5e+02;
Matches 22; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY 5178 GAGCCCCAAATTTGGGCTTCAGCGTGGA 5206
DB 50 GAACCCCAATTTTGGGCTTCACCTGTGA 22

RESULT 285
ACAB9736
ID ACAB9736 standard; DNA; 21 BP.

ACAB9736;
09-JUL-2003 (first entry)

Herbicide resistance polymorphic marker related primer #35.

Polymorphic marker; herbicide resistance; herbicide susceptible plant;
herbicide resistant plant; Conyza canadensis; Lolium rigidum; goosegrass;
glyphosate; paraquat; sulfonyl urea moiety; PCR; primer; ss.

Synthetic.
WO2003031937-A2.
17-APR-2003.
11-OCT-2002; 2002WO-US032637.
12-OCT-2001; 2001US-0328750P.

(MORP-) MORPHOTEK INC.
Chao Q, Grasso L, Nicolaides NC, Sass PM;
WPI; 2003-430273/40.

Identifying polymorphic markers of herbicide resistance in a plant, by
analyzing genomic DNA of herbicide resistant and susceptible plants, and
identifying difference that correlate with resistance or susceptibility.

Example 6; Page 38; 168bp; English.

The invention describes a method of identifying polymorphic markers of
herbicide resistance in a plant. The method involves: isolating genomic
DNA from an herbicide susceptible plant and an herbicide resistant plant
of the same species, performing genetic analysis and identifying
differences between their genomic DNA, identifying the difference that
correlate with herbicide resistance or susceptibility, thus identifying
polymorphic markers. The method is useful for identifying polymorphic
markers of herbicide resistance in a plant e.g. Conyza canadensis, Lolium
rigidum and goosegrass species, where the herbicides include glyphosate,
paraquat and sulfonyl urea moieties. This sequence represents a primer
associated with the identification of polymorphic markers of herbicide
resistance

Sequence 21 BP; 10 A; 10 C; 10 G; 0 T; 0 U; 1 Other;

Query Match 0.3%; Score 17.6; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 4.3e+02;
Matches 18; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1180 AGAGAAAGAGAGAGAGAA 1199
DB 2 AGAGAGAGAGAGAGAGAH 21

RESULT 286
AAV04338
ID AAV04338 standard; DNA; 24 BP.
XX AAV04338;
AC AAV04338;

XX 20-APR-1998 (first entry)
DT Primer used in preparation of osteoprotegerin products.
XX
DE
XX Osteoprotegerin; antibody; diagnosis; affinity purification;
XX recombinant production; transgenic animal; treatment; prevention;
KW antisense oligonucleotide; probe; detection; screening; bone disease;
KW osteoporosis; Paget's disease; hypercalcaemia; hyperparathyroidism;
KW rheumatoid arthritis; osteomyelitis; osteolytic metastasis;
KW periodontal bone loss; bone necrosis; osteopaenia; PCR primer; ss.

Synthetic.
DE19654610-A1.
26-JUN-1997.
20-DEC-1996; 96DE-01054610.
22-DEC-1995; 95US-00577788.
PR 03-SEP-1996; 96US-00706945.
XX
XX (AMGE-) AMGEN INC.
XX Boyle WJ, Lacey DL, Calzone FJ, Chang M;
XX WPI; 1997-334271/31.
XX
XX Nucleic acid encoding osteoprotegerin - useful for treatment of diseases
PT involving excessive bone loss, e.g. osteoporosis.
XX
XX Example 5; Page 18; 182bp; German.

The present sequence is a primer, which was used in the preparation of
osteoprotegerin (OPG) products. Anti-OPG antibodies can be used in OPG
diagnostic assays, and as affinity purification materials. The OPG cDNA
can be used to express recombinant OPG and to generate transgenic
CC animals. It can also be used to regulate the level of OPG in mammals,
CC specifically to increase OPG levels, however the use of antisense
CC sequences is also contemplated. Fragments of the cDNA can be used as
CC probes to detect OPG expressing cells and tissue, and to screen cDNA
CC libraries for related sequences. OPG can be used to treat or prevent bone
CC diseases, specifically excessive bone loss, e.g. osteoporosis, Paget's
CC disease, hypercalcaemia, hyperparathyroidism, rheumatoid arthritis,
CC osteomyelitis, osteolytic metastases, periodontal bone loss, bone
CC necrosis and osteopaenia

Sequence 24 BP; 5 A; 6 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.6; DB 1; Length 24;
Best Local Similarity 83.3%; Pred. No. 4.4e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 4663 CAGATCGGAGACCTGTTCAGCTTG 4686
DB 1 CAGATCTGAGACTGTCTCAGTTTG 24

RESULT 287
AAH73990/C
ID AAH73990 standard; DNA; 24 BP.
XX
XX AAH73990;
AC
XX 09-OCT-2001 (first entry)
DT
XX Human corticosteroid 26 coding sequence PCR primer #2.
DE
XX Human; corticosteroid 26; cytostatic; vitruce; immunomodulatory;
KW antiinflammatory; haemostatic; gene therapy; malignant tumour;
KW haemopathy; HIV infection; immunological disease; inflammation;
KW PCR primer; ss.

```

XX OS Homo sapiens.
XX PN WO200155196-A1.
XX PD 02-AUG-2001.
XX PF 21-JAN-2001, 2001MO-CN000089.
XX PR 28-JAN-2000, 2000CN-0011617.
XX PA (BIOD-) BIODOR GENE TECHNOLOGY LTD SHANGHAI.
XX PI Mao Y, Xie Y;
XX DR WPI, 2001-483224/52.
XX PT Human corticosterin 26 and encoded polynucleotide, used in diagnosis and
PT treatment of malignant tumors, hemopathy, human immunodeficiency virus
PT infection, immunological diseases and inflammation.
XX PS Example 3, Page 12, 35pp, Chinese.
XX CC The present invention relates to human corticosterin 26 and its coding
CC sequence (see AAF73988 and AAG6305). The corticosterin and its coding
CC sequence are useful in the diagnosis and treatment of malignant tumors,
CC haemopathy, HIV infection, immunological diseases and various
CC inflammation. The present sequence is a PCR primer, which was used in an
CC example from the present invention
XX SQ Sequence 24 BP, 11 A, 2 C, 2 G, 9 T, 0 U, 0 Other;

Query Match 0.3%; Score 17.6; DB 1; Length 24;
Best Local Similarity 83.3%; Pred. No. 4.4e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 5355 CCTATAATTAATTAATTTTACT 5378
Db | | | | | | | | | | | | | | | | | |
24 CATGTATATTAAATTTTGTACT 1

RESULT 289
AAH44623/c
ID AAH44623 standard; DNA; 24 BP.
XX AC AAH44623;
XX DT 16-NOV-2001 (first entry)
XX DE Human PD 17 PCR primer 2 SEQ ID NO:4.
XX KW Human; PD 17; cytostatic; virucidal; immunomodulatory; haemostatic;
KW antiinflammatory; gene therapy; malignant tumour; haemopathy;
KW human immunodeficiency virus infection; HIV infection;
KW immunological disease; inflammation; PCR primer; ss.
XX OS Homo sapiens.
XX PN WO200164729-A1.
XX PD 07-SEP-2001.
XX PF 26-FEB-2001, 2001MO-CN000221.
XX PR 02-MAR-2000, 2000CN-0011868.
XX PA (BIOW-) BIOWINDOW GENE DEV INC SHANGHAI.
XX PI Mao Y, Xie Y;
XX DR WPI, 2001-550164/61.
XX PT New human polypeptide PD 17 for diagnosing and treating malignant tumor,

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PT hemopathy, human immunodeficiency virus (HIV) infection, immunological
PT diseases and inflammations.
XX PS Example 2, Page 11, 36pp, Chinese.
XX CC The present invention describes the human PD 17 protein (I). (I) has
CC cytostatic, virucidal, immunomodulatory, antiinflammatory and haemostatic
CC activities. The polynucleotide encoding (I) can be used in gene therapy.
CC (I) and the polynucleotide encoding it are applicable in the diagnosis
CC and treatment of malignant tumour, haemopathy, human immunodeficiency
CC virus (HIV) infection, immunological diseases and various inflammations.
CC The present sequence represents a PCR primer for human PD 17, which is
CC used in an example from the present invention
XX SQ Sequence 24 BP, 0 A, 2 C, 1 G, 21 T, 0 U, 0 Other;

Query Match 0.3%; Score 17.6; DB 1; Length 24;
Best Local Similarity 83.3%; Pred. No. 4.4e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 5402 CAAAAGAGAAATGAAATTA 5425
Db | | | | | | | | | | | | | | | | | |
24 CAAAAAGAGAAAGAGAGAAA 1

RESULT 289
AAFS7740
ID AAF57740 standard; DNA; 24 BP.
XX AC AAF57740;
XX DT 19-APR-2001 (first entry)
XX DE Human OPG PCR primer #1.
XX KW Bone loss; osteoprotegerin; OPG; rheumatoid arthritis; hyperalgesia;
KW multiple sclerosis; osteoporosis; osteomyelitis; asthma; inflammation;
KW systemic lupus erythematosus; graft-versus-host disease; septic shock;
KW acute pancreatitis; Alzheimer's disease; anorexia; atherosclerosis; pain;
KW coronary condition; myocardial infarction; cancer; diabetes; psoriasis;
KW endometriosis; fever; glomerulonephritis; inflammatory bowel disease;
KW ischaemia; Parkinson's disease; PCR primer; ss.
XX OS Homo sapiens.
XX PN WO200103719-A2.
XX PD 18-JAN-2001.
XX PF 07-JUL-2000, 2000MO-US018667.
XX PR 09-JUL-1999, 99US-00350670.
XX PR 09-DEC-1999, 99US-00457647.
XX PA (AMGE-) AMGEN INC.
XX PI Boyle WJ, Lacey DL, Calzone FU, Chang M, Senaldi G;
XX DR WPI, 2001-103031/11.
XX PT Treating conditions leading to bone loss such as rheumatoid arthritis,
PT multiple sclerosis and asthma, comprises administering an osteoprotegerin
PT protein in conjunction with e.g. inhibitors of interleukin and tumor
PT necrosis factor alpha.
XX PS Example 5, Page 88, 316pp, English.
XX CC The present invention relates to a method for treating conditions leading
CC to bone loss. The method comprises administering a purified and isolated
CC osteoprotegerin (OPG) protein (AAFS7836-AAFS7838 and AAB66974-AAB66976)
CC in conjunction with other substances such as tumour necrosis factor-alpha
CC (TNF-alpha) inhibitors, interleukin (IL)-6, -8 and -18 inhibitors, ICE
CC modulators, fibroblast growth factor (FGF)-1-10 modulators and/or platelet

```

CC activating factor (PAF) antagonists. The method is useful for treating
 CC conditions leading to bone loss such as rheumatoid arthritis, multiple
 CC sclerosis, osteoporosis, osteomyelitis and asthma. The method is also
 CC useful for treating inflammation, systemic lupus erythematosus (SLE) and
 CC graft-versus-host disease (GVHD). Other diseases that can be treated
 CC include acute pancreatitis, Alzheimer's disease, anorexia,
 CC atherosclerosis, coronary conditions (e.g. myocardial infarction),
 CC cancer, diabetes, endometriosis, fever, glomerulonephritis, hyperalgesia,
 CC inflammatory bowel disease, ischaemia, pain, Parkinson's disease,
 CC psoriasis and septic shock. The present sequence is a PCR primer used in
 CC the present invention

XX Sequence 24 BP; 5 A; 6 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.6; DB 1; Length 24;

Best Local Similarity 83.3%; Pred. No. 4.4e+02;
 Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 4663 CAGATCGGAGAGCTGTTGAGCTTG 4686

DB 1 CAGATCTGAGCTGCTCAGTTG 24

RESULT 290
 ABA0517/c
 ID ABA0517 standard; DNA; 24 BP.

XX ABA0517;

XX 22-FEB-2002 (first entry)

XX Human Tre carcinogenic gene protein 10.56 PCR primer 2.

XX Human; Tre carcinogenic gene protein 10.56; cytostatic; haemostatic;
 KW virinide; immunomodulatory; antiinflammatory; gene therapy; cancer;
 KW haemopathy; human immunodeficiency virus; HIV; infection;
 KW immunological disease; inflammatory disorder; PCR primer; ss.

XX Homo sapiens.

XX WO200190131-A1.

XX 29-NOV-2001.

XX 21-MAY-2001; 2001WO-CN000833.

XX 24-MAY-2000; 2000CN-00115824.

XX (SHAN-) SHANGHAI BIOWINDOM GENE DEV INC.

XX Mao Y, Xie Y;

XX WPI; 2002-083078/11.

XX Human tre carcinogenic gene protein 10.56 and encoding polynucleotide,
 PT used in diagnosis and treatment of malignant tumors, hemopathy, human
 PT immunodeficiency virus infection, immunological diseases and
 PT inflammation.

XX Example 2; Page 17; 36pp; Chinese.

XX The invention relates to an isolated polypeptide of human tre
 CC carcinogenic gene protein 10.56 comprising a 96 residue amino acid
 CC sequence, fully defined in the specification, or its fragment, analogue
 CC or derivative. The polypeptide is useful in the diagnosis and treatment
 CC of malignant tumors, haemopathy, human immunodeficiency virus (HIV)
 CC infection, immunological diseases and various inflammatory disorders. The
 CC present sequence is a primer used to amplify a polynucleotide encoding
 CC the polypeptide of the invention

XX Sequence 24 BP; 0 A; 3 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.6; DB 1; Length 24;

Best Local Similarity 83.3%; Pred. No. 4.4e+02;
 Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 5401 AAAAAAAAAAATGAAATTA 5424

DB 24 AAAAAAAAAAGAAAGAAAAA 1

RESULT 291
 AAD33161
 ID AAD33161 standard; DNA; 24 BP.

XX AAD33161;

XX 01-JUL-2002 (first entry)

XX Glucokinase cDNA specific RT-PCR probe, glu/taq.

XX Phytanic acid; non-insulin dependent diabetes mellitus; NIDDM; obesity;
 KW glucose tolerance; food supplement; feed supplement; hyperinsulinaemia;
 KW hyperlipidaemia; hypertension; insulin therapy; hypercholesterolaemia;
 KW hypertiglyceridaemia; probe; glucokinase; reverse transcription PCR;
 KW RT-PCR; ss.

XX Unidentified.

XX Key Location/Qualifiers

XX modified_base 1

XX /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER = 6-carboxy-fluorescein (FAM)-adenine"

XX modified_base 24

XX /*tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER = 6-carboxy-tetramethyl-rhodamine (TAMRA) -
 cytosine"

XX EP117789-A2.

XX 06-FEB-2002.

XX 30-JUL-2001; 2001EP-00118230.

XX 04-AUG-2000; 2000EP-00116848.

XX (HOFF) ROGHE VITAMINS AG.

XX Fluehmann B, Heim M, Hunziker W, Weber P;

XX WPI; 2002-270864/32.

XX New composition comprising phytanic acid or its derivatives, useful for
 PT treating or preventing non-insulin dependent diabetes mellitus, impaired
 PT glucose tolerance and related obesity.

XX Example 3; Page 8; 29pp; English.

XX The invention relates to the use of phytanic acid or its derivatives for
 CC the treatment or prevention of diabetes mellitus. The invention also
 CC relates to a method for treating or preventing non-insulin dependent
 CC diabetes mellitus (NIDDM) or other conditions associated with impaired
 CC glucose tolerance such as obesity using phytanic acid or its derivatives.
 CC The phytanic acid, their derivatives or their precursors are useful as
 CC pharmaceutical compounds or supplements to foods or feeds for the
 CC treatment or prevention of type II or NIDDM, hyperlipidaemia,
 CC hypercholesterolaemia, hyperinsulinaemia, syndrome X, hypertension,
 CC hypertiglyceridaemia, impaired glucose tolerance and related obesity.
 CC They are also useful in insulin therapy in combination with known active
 CC compounds. The present sequence is glucokinase cDNA specific reverse
 CC transcription PCR (RT-PCR) probe used in the exemplification of the
 CC invention

XX Sequence 24 BP; 6 A; 8 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.6; DB 1; Length 24;
 Best Local Similarity 83.3%; Pred. No. 4.4e+02;
 Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 3128 AGCTGACCTGACCTTCATATGTC 3151
 |||||
 DB 1 AGCTGACCTGACCTTCATATGTC 24

RESULT 292
 ABA05472
 ID ABA05472 standard; DNA; 24 BP.
 XX
 AC ABA05472;
 XX
 DT 01-MAR-2002 (first entry)
 XX
 DE Human immune response factor 64 PCR primer SEQ ID NO 4.
 XX
 KM Human; immune response factor 64; infection; HIV; inflammation;
 KM primary T lymphocyte immune deficiency disease; haemopathy; tumour;
 KM human immunodeficiency virus; immune diseases; growth; PCR primer; ss;
 KM embryonic development disturbance; development obstruction disease.
 XX
 OS Homo sapiens.
 XX
 PN CN1311215-A.
 XX
 PD 05-SEP-2001.
 XX
 PF 02-MAR-2000; 2000CN-00111819.
 XX
 PR 02-MAR-2000; 2000CN-00111819.
 XX
 PA (BODE-) BODE GENE DEV CO LTD SHANGHAI.
 XX
 PI Mao Y, Xie Y;
 XX
 DR WPI; 2002-049910/07.
 XX
 DE New human immune response factor 64 polypeptide and encoding
 PT polynucleotide useful for treating immune disease, tumor and
 PT inflammation.
 PT
 PS Example 3; Page 17 (Disclosure); 34pp; Chinese.
 XX
 CC The invention relates to human immune response factor 64 polypeptide, its
 CC recombinant production and antagonist, encoding polynucleotide and
 CC application. The polypeptide is useful for treating primary T lymphocyte
 CC immune deficiency disease, human immunodeficiency virus infection, other
 CC immune diseases, various tumours, embryonic development disturbance
 CC disease, growth and development obstruction disease, inflammation and
 CC haemopathy. The present sequence is that of a PCR primer, useful to the
 CC invention
 CC
 SQ Sequence 24 BP; 11 A; 2 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.6; DB 1; Length 24;
 Best Local Similarity 83.3%; Pred. No. 4.4e+02;
 Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 5269 GGAAGGAAGTTTTCAGAAATA 5292
 |||||
 DB 1 GGAAGGAAGTTTTCAGAAATA 24

RESULT 293
 ABA99264/C
 ID ABA99264 standard; DNA; 24 BP.
 XX
 AC ABA99264;
 XX

DT 08-MAY-2002 (first entry)
 XX
 DE Human tra oncogene 10-56 RT-PCR primer 2.
 XX
 KM Oncogene; tra oncogene 10.56; human; treatment; gene therapy; cytostatic;
 KM haemostatic; virucide; immunomodulatory; antiinflammatory; diagnosis;
 KM malignant tumour; haemopathy; human immunodeficiency virus;
 KM HIV infection; immunological disease; inflammation; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200200824-A2.
 XX
 PD 03-JAN-2002.
 XX
 PF 11-JUN-2001; 2001WO-CN000936.
 XX
 PR 12-JUN-2000; 2000CN-00116436.
 XX
 PA (BIOW-) BIOWINDOW GENE DEV INC SHANGHAI.
 XX
 PI Mao Y, Xie Y;
 XX
 DR WPI; 2002-075668/10.
 XX
 DE human tra oncogene 10.56 and encoding polynucleotide, used in diagnosis
 PT and treatment of malignant tumors, hemopathy, human immunodeficiency
 PT virus infection, immunological diseases and inflammation.
 PT
 PS Example 2; Page 12; 32pp; Chinese.
 XX
 CC This invention describes a novel human tra oncogene 10.56 which has
 CC cytostatic, haemostatic, virucide, immunomodulatory and antiinflammatory
 CC activity and can be used for gene therapy. The polypeptide of the
 CC invention and its encoding polynucleotide are used in diagnosis and
 CC treatment of malignant tumors, haemopathy, human immunodeficiency virus
 CC (HIV) infection, immunological diseases and various inflammations. This
 CC sequence represents an RT-PCR primer used in the amplification of the
 CC human tra oncogene 10.56 gene which is described in the disclosure of the
 CC invention
 CC
 SQ Sequence 24 BP; 0 A; 3 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.6; DB 1; Length 24;
 Best Local Similarity 83.3%; Pred. No. 4.4e+02;
 Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 5401 ACRAAAGAAAAATGAAATTA 5424
 |||||
 DB 24 AAAAAAGAAAAAGAAAAAAA 1

RESULT 294
 ADG16126/C
 ID ADG16126 standard; DNA; 24 BP.
 XX
 AC ADG16126;
 XX
 DT 26-FEB-2004 (first entry)
 XX
 DE Compound activity characterisation-related oligonucleotide SeqDI.
 XX
 KM compound activity characterisation; cellular activity;
 KM phenotypic attribute; candidate medicine; candidate treatment;
 KM multiple biological descriptor; cell marker; ss.
 XX
 OS Unidentified.
 XX
 PN WO200181895-A2.
 XX
 PD 01-NOV-2001.
 XX
 PF 24-APR-2001; 2001WO-US013248.

```
XX 26-APR-2000; 2000US-0199778P.
PR 20-FEB-2001; 2001US-00790214.
XX
XX (CYTO-) CYTOKINETICS INC.
XX
XX Oestreicher DR, Sabry JH, Adams CL, Vaisberg EA, Crompton AM;
PI WPI; 2002-041423/05.
XX
XX Characterizing cellular activity of compound, by receiving images of
PT cells with known activity and images of cells treated with compound,
PT characterizing phenotypic attributes of images and comparing the
PT phenotypes.
XX
XX PS Disclosure; Fig 18; 139pp; English.
XX
XX This invention relates to a novel method for the characterisation of the
CC activity of a compound on cell. The method involves receiving images of
CC cells with a cellular activity and images of other cells treated with the
CC compound, quantitatively characterising phenotypic attributes of the
CC image of cells with a cellular activity to produce a target phenotype for
CC the cellular activity and that of the image of other cells to produce a
CC second phenotype for the compound, and comparing the two phenotypes to
CC determine whether the compound possesses cellular activity. The invention
CC may be useful for characterising cellular activity of a compound, for
CC determining information about properties of substances based upon the
CC information about structure of living or non-living cells exposed to
CC substances. The invention is also useful for identifying promising
CC candidates in a search for new and better medicines and treatments using
CC multiple biological descriptors from a single cell markers or components.
XX
XX SQ Sequence 24 BP; 1 A; 0 C; 0 G; 23 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 17.6; DB 1; Length 24;
XX Best Local Similarity 83.3%; Pred. No. 4.4e+02;
XX Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 5389 AATTAAAAATTCAAAAAGAAA 5412
XX ||||| ||||| ||||| |||||
XX 24 AATAAAAAATTCAAAAAGAAA 1
XX
XX RESULT 295
XX ADG16127/c
XX ID ADG16127 standard; DNA; 24 BP.
XX
XX AC ADG16127;
XX
XX DT 26-FEB-2004 (first entry)
XX
XX DE Compound activity characterisation-related oligonucleotide SeqID2.
XX
XX KW compound activity characterisation; cellular activity;
XX phenotypic attribute; candidate medicine; candidate treatment;
XX multiple biological descriptor; cell marker; ss.
XX
XX OS Unidentified.
XX
XX PN WO200181895-A2.
XX
XX PD 01-NOV-2001.
XX
XX PF 24-APR-2001; 2001WO-US013248.
XX
XX PR 26-APR-2000; 2000US-0199778P.
XX PR 20-FEB-2001; 2001US-00790214.
XX
XX (CYTO-) CYTOKINETICS INC.
XX
XX PA Oestreicher DR, Sabry JH, Adams CL, Vaisberg EA, Crompton AM;
XX PI WPI; 2002-041423/05.
XX
XX DR
```

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XX Characterizing cellular activity of compound, by receiving images of
PT cells with known activity and images of cells treated with compound,
PT characterizing phenotypic attributes of images and comparing the
PT phenotypes.
XX
XX PS Disclosure; Fig 18; 139pp; English.
XX
XX This invention relates to a novel method for the characterisation of the
CC activity of a compound on cell. The method involves receiving images of
CC cells with a cellular activity and images of other cells treated with the
CC compound, quantitatively characterising phenotypic attributes of the
CC image of cells with a cellular activity to produce a target phenotype for
CC the cellular activity and that of the image of other cells to produce a
CC second phenotype for the compound, and comparing the two phenotypes to
CC determine whether the compound possesses cellular activity. The invention
CC may be useful for characterising cellular activity of a compound, for
CC determining information about properties of substances based upon the
CC information about structure of living or non-living cells exposed to
CC substances. The invention is also useful for identifying promising
CC candidates in a search for new and better medicines and treatments using
CC multiple biological descriptors from a single cell markers or components.
XX
XX SQ Sequence 24 BP; 2 A; 0 C; 0 G; 22 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 17.6; DB 1; Length 24;
XX Best Local Similarity 83.3%; Pred. No. 4.4e+02;
XX Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 5393 AAAAAAATTCAAAAAGAAAAT 5416
XX ||||| ||||| ||||| |||||
XX 24 AAAAAAATTCAAAAAGAAAAT 1
XX
XX RESULT 296
XX ACC57313
XX ID ACC57313 standard; DNA; 24 BP.
XX
XX AC ACC57313;
XX
XX DT 27-JUN-2003 (first entry)
XX
XX DE Zinc finger protein 11.55 related PCR primer #SEQ ID 3.
XX
XX KW Zinc finger protein; 11.55; human immunodeficiency virus; HIV; cancer;
XX PCR; primer; ss.
XX
XX OS Unidentified.
XX
XX PN CN1363594-A.
XX
XX PD 14-AUG-2002.
XX
XX PF 05-JAN-2001; 2001CN-00105078.
XX
XX PR 05-JAN-2001; 2001CN-00105078.
XX
XX PA (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX
XX PI Mao Y, Xie Y;
XX
XX DR WPI; 2003-000323/01.
XX
XX PT Polypeptide-zinc finger protein 11.55 and polynucleotide encoding it.
XX
XX PS Example 2; Page 17 (disclosure); 33pp; Chinese.
XX
XX The invention relates to a novel zinc finger protein designated 11.55.
XX Also disclosed are the polynucleotide encoding it, and a process for
XX preparing the polypeptide using DNA recombination techniques. The
XX application of the polypeptide is in treating diseases such as cancer and
XX human immunodeficiency virus (HIV) infection. The current sequence
XX represents a zinc finger protein 11.55 related PCR primer
```



```
XX
SQ Sequence 24 BP; 5 A; 6 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.6; DB 1; Length 24;
Best Local Similarity 83.3%; Pred. No. 4.4e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 3589 CAGTTGCTCAGGCTATCTCAAA 3612
Db 1 CAGTTGCTCAGGCTATCTCAAA 24

RESULT 297
ADE90091
ID ADE90091 standard; DNA; 24 BP.
XX
XX ADE90091;
AC
XX
XX 12-FEB-2004 (first entry)
DT
XX
XX AC133 PCR primer SEQ ID NO:5.
DE
XX
XX pancreatic ductal carcinoma-specific gene; pancreatic ductal carcinoma;
KM cytostatic; gene therapy; PCR primer; AC133; ss.
XX
OS Synthetic.
XX
XX WO2003097879-A2.
PN
XX
XX 27-NOV-2003.
PD
XX
XX 22-MAY-2003; 2003MO-JP006398.
PP
XX
XX 22-MAY-2002; 2002US-0382022P.
PR
XX
XX (FUJI ) FUJISAWA PHARM CO LTD.
PA
XX
XX Mano H;
PI
XX
XX WPI; 2004-022895/02.
DR
XX
XX Identifying a pancreatic ductal carcinoma-specific gene, useful in
PT treating or preventing pancreatic ductal carcinoma, by preparing
PT pancreatic ductal cells from a pancreatic ductal carcinoma patient and a
PT normal individual.
XX
XX Example 5; SEQ ID NO 5; 86pp; English.
XX
XX The present invention describes a method for identifying a pancreatic
XX ductal carcinoma-specific gene. The method comprises preparing pancreatic
XX ductal cells from a pancreatic ductal carcinoma patient and a normal
XX individual. Also described: (1) a method of testing for pancreatic ductal
XX carcinoma; (2) a method for identifying a drug candidate compound for
XX treating or preventing pancreatic ductal carcinoma; and (3) a drug for
XX testing for pancreatic ductal carcinoma comprising, as an active
XX ingredient, a molecule selected from an antibody binding to a protein
XX encoded by a pancreatic ductal carcinoma-specific gene and an
XX oligonucleotide specifically hybridizing to a transcription product of a
XX pancreatic ductal carcinoma-specific gene or comprising a compound
XX identified by the method of (2). A pancreatic ductal carcinoma-specific
XX gene has cytostatic activity, and can be used in gene therapy. The method
XX is useful in identifying a pancreatic ductal carcinoma-specific gene
XX useful preparing compounds for treating and/or preventing pancreatic
XX ductal carcinoma. The present sequence represents a PCR primer which is
XX used in an example from the present invention.
XX
SQ Sequence 24 BP; 9 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.6; DB 1; Length 24;
Best Local Similarity 83.3%; Pred. No. 4.4e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 2692 GAGACTCGAACAACGTTCTG 2715
```

```
Db 1 GAGACTCGAACAACGTTCTG 24

RESULT 298
ADG75919/c
ID ADG75919 standard; DNA; 24 BP.
XX
XX ADG75919;
AC
XX
XX 11-MAR-2004 (first entry)
DT
XX
XX Immunostimulatory non-Cpg oligonucleotide IMR 174 SeqID 21.
DE
XX
XX ss; non-Cpg; immunostimulatory; non-palindromic; immune response;
KM proliferation; differentiation; cytokine; antibody production; B-cell;
KM plasmacytoid dendritic cell; immunomodulator; gene therapy;
KM chronic myelogenous leukemia; melanoma; Kaposi's sarcoma;
KM renal cell carcinoma.
XX
XX Synthetic.
XX
XX WO2003101375-A2.
PN
XX
XX 11-DEC-2003.
PD
XX
XX 30-MAY-2003; 2003MO-EP005691.
PP
XX
XX 30-MAY-2002; 2002CA-02388049.
PR
XX
XX (IMMU-) IMMUNOTECH SA.
PA
XX
XX Lopez RA;
PI
XX
XX WPI; 2004-053333/05.
DR
XX
XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
PT acid sequence motif, useful for inducing B-cell activation, treating,
PT preventing or ameliorating immune system disorder or tumoral disease e.g.
PT melanoma.
XX
XX Claim 14; SEQ ID NO 21; 139pp; English.
XX
XX This invention relates to novel immunostimulatory oligonucleotides that
XX contain a non-palindromic sequence motif. Specifically, it refers to DNA
XX oligonucleotides (without a Cpg motif), which can stimulate an immune
XX response in animals of the order of primates, including humans. The immune
XX response is characterized by the proliferation, differentiation, cytokine
XX and antibody production in B-cells, as well as cell differentiation and
XX cytokine production in plasmacytoid dendritic cells. The present
XX invention describes immunomodulator compositions that also comprise an
XX antigen selected from, for example, viruses, bacteria, parasites, tumour
XX cells and glycolipids. As such, these DNA oligos can be used in gene
XX therapy for inducing B-cell activation, treating, preventing or
XX ameliorating an immune system disorder or a tumoral disease including
XX chronic myelogenous leukemia, melanoma, Kaposi's sarcoma, and renal cell
XX carcinoma. This oligonucleotide sequence is an immunostimulatory non-Cpg
XX variant DNA oligo, used in an exemplification of the invention.
XX
SQ Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.6; DB 1; Length 24;
Best Local Similarity 83.3%; Pred. No. 4.4e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 5396 AAAATACAAAAGAAAATGAA 5419
Db 24 AAAATACAAAAGAAAATGAA 1

RESULT 299
ADG75920/c
ID ADG75920 standard; DNA; 24 BP.
```

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XX ADG75920;
AC
XX 11-MAR-2004 (first entry)
DT
XX
DE Immunostimulatory non-CpG oligonucleotide IMT 175 SeqID 22.
XX
XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
KM proliferation; differentiation; cytokine; antibody production; B-cell;
KM plasmacytoid dendritic cell; immunomodulator; gene therapy;
KM chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
KM renal cell carcinoma.
XX
XX Synthetic.
OS
XX WO2003101375-A2.
PN
XX
XX 11-DEC-2003.
PD
XX
XX 30-MAY-2003; 2003WO-EP005691.
PF
XX
XX 30-MAY-2002; 2002CA-02388049.
PR
XX (IMMU-) IMMUNOTECH SA.
PA
XX Lopez RA;
PI
XX
XX WPI; 2004-053333/05.
DR
XX
XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
PT acid sequence motif, useful for inducing B-cell activation, treating,
PT preventing or ameliorating immune system disorder or tumoral disease e.g.
PT melanoma.
XX
XX Claim 14; SEQ ID NO 22; 139pp; English.
PS
XX
XX This invention relates to novel immunostimulatory oligonucleotides that
CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
CC oligonucleotides (without a CpG motif), which can stimulate an immune
CC response in animals of the order of primate, including humans. The immune
CC response is characterised by the proliferation, differentiation, cytokine
CC and antibody production in B-cells, as well as cell differentiation and
CC cytokine production in plasmacytoid dendritic cells. The present
CC invention describes immunomodulator compositions that also comprise an
CC antigen selected from, for example, viruses, bacteria, parasites, tumour
CC cells and glycolipids. As such, these DNA oligos can be used in gene
CC therapy for inducing B-cell activation, treating, preventing or
CC ameliorating an immune system disorder or a tumoral disease including
CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
CC carcinoma. This oligonucleotide sequence is an immunostimulatory non-CpG
CC variant DNA oligo, used in an exemplification of the invention.
XX
XX Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.3%; Score 17.6; DB 1; Length 24;
XX Best Local Similarity 83.3%; Pred. No. 4.4e+02;
XX Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 5398 AATACAAAGAAAAATGAAA 5421
DB 24 AAAAAAAAAACAAATGAAA 1

```

```

KM ss; non-CpG; immunostimulatory; non-palindromic; immune response;
KM proliferation; differentiation; cytokine; antibody production; B-cell;
KM plasmacytoid dendritic cell; immunomodulator; gene therapy;
KM chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
KM renal cell carcinoma.
XX
XX Synthetic.
OS
XX WO2003101375-A2.
PN
XX
XX 11-DEC-2003.
PD
XX
XX 30-MAY-2003; 2003WO-EP005691.
PF
XX
XX 30-MAY-2002; 2002CA-02388049.
PR
XX (IMMU-) IMMUNOTECH SA.
PA
XX Lopez RA;
PI
XX
XX WPI; 2004-053333/05.
DR
XX
XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
PT acid sequence motif, useful for inducing B-cell activation, treating,
PT preventing or ameliorating immune system disorder or tumoral disease e.g.
PT melanoma.
XX
XX Claim 14; SEQ ID NO 20; 139pp; English.
PS
XX
XX This invention relates to novel immunostimulatory oligonucleotides that
CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
CC oligonucleotides (without a CpG motif), which can stimulate an immune
CC response in animals of the order of primate, including humans. The immune
CC response is characterised by the proliferation, differentiation, cytokine
CC and antibody production in B-cells, as well as cell differentiation and
CC cytokine production in plasmacytoid dendritic cells. The present
CC invention describes immunomodulator compositions that also comprise an
CC antigen selected from, for example, viruses, bacteria, parasites, tumour
CC cells and glycolipids. As such, these DNA oligos can be used in gene
CC therapy for inducing B-cell activation, treating, preventing or
CC ameliorating an immune system disorder or a tumoral disease including
CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
CC carcinoma. This oligonucleotide sequence is an immunostimulatory non-CpG
CC variant DNA oligo, used in an exemplification of the invention.
XX
XX Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.3%; Score 17.6; DB 1; Length 24;
XX Best Local Similarity 83.3%; Pred. No. 4.4e+02;
XX Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 5394 AAAAAATACAAAAAGAAAAATG 5417
DB 24 AAAAAAAAAAAAAACAAATG 1

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RESULT 300
ADG75918/C
ID ADG75918 standard; DNA; 24 BP.
XX
XX ADG75918;
AC
XX
XX 11-MAR-2004 (first entry)
DT
XX
XX Immunostimulatory non-CpG oligonucleotide IMT 173 SeqID 20.
DE
XX

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RESULT 301
ADM28709
ID ADM28709 standard; DNA; 24 BP.
XX
XX ADM28709;
AC
XX
XX 20-MAY-2004 (first entry)
DT
XX
XX Human OPG cDNA 3' end PCR primer #2.
DE
XX
XX Human; OPG; ss; primer; bone resorption; excessive bone loss;
KM osteoporosis; Paget's disease of bone; hypercalcaemia;
KM hyperparathyroidism; steroid-induced osteopenia; rheumatoid arthritis;
KM osteomyelitis; osteolytic metastasis; periodontal bone loss;
KM Cushing's syndrome; acromegaly; osteogenesis imperfecta; homocystinuria;
KM Menke's syndrome; Riley-day syndrome; immobilisation of extremity;
KM tumour; haematologic malignancy; multiple myeloma; lymphoma; leukaemia;
KM

```

KM renal function disorder; osteopenia; osteonecrosis; bone cell death;
 KM PCR; osteoprotegerin; transgenic.
 OS Homo sapiens.
 XX US2003207827-A1.
 XX 06-NOV-2003.
 PD 24-SEP-1999; 99US-00405032.
 XX 22-DEC-1995; 95US-00577788.
 XX 03-SEP-1996; 96US-00706945.
 PR 20-DEC-1996; 96US-00771777.
 PR 12-AUG-1998; 98US-00132985.
 XX (BOYLE/) BOYLE W J.
 PA (LACE/) LACEY D L.
 PA (CALZ/) CALZONE F J.
 PA (CHAN/) CHANG M.
 PI Boyle WJ, Lacey DL, Calzone FJ, Chang M;
 XX WPI; 2004-041572/04.
 XX Novel osteoprotegerin useful for treating conditions resulting in bone
 PT loss such as osteoporosis, hypercalcemia, Paget's disease of bone, bone
 PT loss caused by rheumatoid arthritis or osteomyelitis.
 PS Example 5; SEQ ID NO 21; 141pp; English.
 XX The invention relates to a purified and isolated polypeptide having
 CC osteoprotegerin (OPG), an OPG polypeptide from rat, human and mouse, or
 CC having amino terminus at residue 22, and 1-216 amino acids are deleted
 CC from carboxy terminus of human OPG polypeptide. Also included are an
 CC isolated nucleic acid encoding an OPG polypeptide (OPG NA), an expression
 CC vector comprising OPG NA, a host cell transformed or transfected with the
 CC vector, a transgenic mammal comprising the cell, producing OPG, a
 CC polypeptide comprising an amino acid sequence of at least about 164 amino
 CC acids comprising four cysteine-rich domains characteristic of the
 CC cysteine rich domains of tumor necrosis factor receptor extracellular
 CC regions (and an activity of increasing bone density), an antibody (Ab) or
 CC its fragment which specifically binds to OPG, a composition comprising
 CC OPG (in a carrier, adjuvant, stabilizer, stabilizer and/or anti-oxidant)
 CC and an osteoprotegerin multimer consisting of osteoprotegerin monomers.
 CC Ab is useful for detecting the presence of OPG in a biological sample
 CC which involves incubating the sample with Ab under conditions that allow
 CC binding of Ab to OPG and detecting the bound Ab. OPG is useful for
 CC assessing the ability of a candidate substance to bind to OPG. OPG NA is
 CC useful for regulating the levels of OPG in an animal (human). The nucleic
 CC acid promotes an increasing in tissue level of OPG. OPG is useful for
 CC treating a bone disorder e.g. excessive bone loss, osteoporosis, Paget's
 CC disease of bone, hypercalcemia, hyperparathyroidism, steroid-induced
 CC osteopenia, bone loss due to rheumatoid arthritis, bone loss due to
 CC osteomyelitis, osteolytic metastases, and periodontal bone loss. The
 CC method further involves administering a substance chosen from bone
 CC morphogenic protein BMP-1 through BMP-12, TGF-beta family members, IL-1
 CC inhibitor, TNFalpha inhibitors, parathyroid hormone and their analogues,
 CC parathyroid hormone related protein and their analogues, B series of
 CC prostaglandins, bisphosphonates, and bone-enhancing minerals. OPG is
 CC useful for treating osteoporosis such as primary osteoporosis, endocrine
 CC osteoporosis (hyperthyroidism, Cushing's syndrome, and acromegaly),
 CC hereditary and congenital forms of osteoporosis (osteogenesis imperfecta
 CC, homocystinuria, Menke's syndrome, and Riley-day syndrome) and
 CC osteoporosis due to immobilization of extremities, hypercalcemia
 CC resulting from solid tumors and haematologic malignancies (multiple
 CC myeloma, lymphoma and leukaemia), idiopathic hypercalcemia, and
 CC hypercalcemia associated with hyperthyroidism and renal function
 CC disorders, osteopenia following surgery and osteonecrosis or bone cell
 CC death. The present sequences is an OPG cDNA cloning PCR primer.
 XX Sequence 24 BP; 5 A; 6 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.6; DB 1; Length 24;
 Best Local Similarity 83.3%; Pred. No. 4.4e+02;
 Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 Oy 4663 CAGATGCGAGAGCTGTCAGCTTG 4686
 Db 1 CAGATCCTGAGAGCTGCTCAGCTTG 24
 RESULT 302
 ADP47840/c
 ID ADP47840 standard; DNA; 24 BP.
 XX
 AC ADP47840;
 XX
 DT 12-AUG-2004 (first entry)
 XX
 DE RT-PCR primer 2 used to analyse human Monarch-1 expression.
 XX
 KM Monarch-1; CATRPIILR 11.2; caspase recruitment domain;
 KM CARD, transcription enhancer, R-binding, pyrin, lots of leucine repeat;
 KM CATRPIILR 11.3; CATRPIILR 16.1; CATRPIILR 16.2; C1A1;
 KM cold-induced autoinflammatory syndrome 1; antiinflammatory; cytoskeletal;
 KM inflammatory disease; cancer; gene therapy; human; purine;
 KM CATRPIILR 19.3; chromosome 19q13; multiple sclerosis; PCR; primer; ss;
 KM RT-PCR.
 XX
 OS Homo sapiens.
 XX
 PN W02004034093-A2.
 XX
 PD 22-APR-2004.
 XX
 PF 30-APR-2003; 2003WO-US013562.
 XX
 PR 30-APR-2002; 2002US-0376626P.
 XX
 PA (YUNC-) UNIV NORTH CAROLINA.
 XX
 PI Ting JY, Linhoff MW, Harton JA, Williams KL, Lich J, O'Connor W;
 PI Moore CB, Davis B, Brickey J, Conti B, Zhang J, Zhu X;
 XX WPI; 2004-348215/32.
 XX
 PT New nucleic acid encoding Monarch-1, CATRPIILR 11.2, CATRPIILR 11.3,
 PT CATRPIILR 16.1, CATRPIILR 16.2 or C1A1 polypeptide, useful in
 PT preparing a composition for treating inflammatory disease or cancer.
 PS Example 2; SEQ ID NO 119; 205pp; English.
 XX
 CC The invention relates to a novel isolated nucleic acid encoding a Monarch
 CC -1, CATRPIILR (CARD [caspase recruitment domain], transcription
 CC enhancer, R(purine)-binding, pyrin, lots of leucine repeats) 11.2,
 CC CATRPIILR 11.3, CATRPIILR 16.1, CATRPIILR 16.2 or C1A1 (cold-
 CC induced autoinflammatory syndrome 1) polypeptide comprising the amino
 CC acids encoded by exon 6 and lacking the amino acids encoded by exon 4 or
 CC its fragment. The nucleic acid of the invention demonstrates
 CC antiinflammatory and cytoskeletal activities and may be useful in preparing
 CC a composition for treating an inflammatory disease or cancer, possibly
 CC via gene therapy. The current sequence is that of a CATRPIILR-related
 CC RT-PCR primer which was used in the exemplification of the invention.
 XX
 Qy Sequence 24 BP; 6 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
 Query Match 0.3%; Score 17.6; DB 1; Length 24;
 Best Local Similarity 83.3%; Pred. No. 4.4e+02;
 Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 Oy 1614 CTTCTACTTCAGCTGAGAGAGCT 1637
 Db 24 CTTCTACTTCAGCTGAGAGAGAT 1

```
RESULT 303
ADP27725/c
ID ADP27725 standard; DNA; 24 BP.
XX
XX ADP27725;
AC
XX
XX 26-AUG-2004 (first entry)
DT
XX
XX PCR primer to amplify a human cancer prognostic marker DNA SeqID 162.
DE
XX
XX human; primer; PCR; prognostic marker; EGFR;
KW epidermal growth factor receptor; cancer; gene expression profiling;
KW microarray; head and neck cancer; colon cancer; metastatic spread;
KW neoplastic disease; ss.
XX
XX Homo sapiens.
OS
XX
XX MO2004046386-A1.
PN
XX
XX 03-JUN-2004.
PD
XX
XX 14-NOV-2003; 2003MO-US036777.
PF
XX
XX 15-NOV-2002; 2002US-0427090P.
PR
XX
XX (GENO-) GENOMIC HEALTH INC.
PA (VALL-) VALL HEBRON UNIV HOSPITAL.
PI
XX
XX Baker JB, Cronin MT, Shak S, Baselga J;
XX WPI; 2004-420643/39.
DR
XX
XX Prognosing a patient with EGFR-expressing colon cancer comprises
PT subjecting a sample comprising EGFR-expressing cancer cells to
PT quantitative analysis of the expression level of the RNA transcript of at
PT least one gene e.g., CD44v3.
XX
XX Claim 54; SEQ ID NO 162; 113bp; English.
PS
XX
XX This invention relates to a novel method concerning prognostic markers
CC associated with EGFR (epidermal growth factor receptor) positive cancer.
CC Specifically, it refers to a gene expression profiling method that can
CC provide a prediction as to whether a patient is likely to respond well to
CC treatment with an EGFR inhibitor. The present invention describes the
CC quantitative analysis of the expression level of the RNA transcript of at
CC least one gene selected from the group of CD44v3, CD44v6, DR5, GROL,
CC KRT17, LAMC2 or their products thereof. It further provides a cDNA,
CC microarray containing named genes that represent prognostic transcripts
CC which are useful for determining whether a patient diagnosed with an EGFR
CC -expressing head or neck cancer or colon cancer exhibits elevated or
CC decreased expression levels of these genes compared to normal. As such,
CC these methods are also useful for prognosing or predicting the likelihood
CC of cancer-attributable death or progression, including recurrence and
CC metastatic spread of a neoplastic disease, as well as drug resistance.
CC This oligonucleotide sequence is a PCR primer used to amplify a human PCR
CC amplicon DNA sequence used as a prognostic cancer marker, given in an
CC exemplification of the invention.
XX
XX
XX Sequence 24 BP; 7 A; 9 C; 5 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 17.6; DB 1; Length 24;
Best Local Similarity 83.3%; Pred. No. 4.4e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 3257 AGGACCTGGCTCTGCTTAGTG 3280
DB 24 AGGAACGTCTCTGGGCTTGtg 1
RESULT 304
AAK33267
ID AAK33267 standard; DNA; 25 BP.
XX
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```
AC AAK33267;
XX
XX 30-JUN-1999 (first entry)
DT
XX
XX PEBP2 alpha A gene expression regulating DNA PCR primer SEQ ID NO:24.
DE
XX
XX PEBP2 alpha A gene; expression; regulation; bone disease; osteoporosis;
KW PCR primer; ss.
XX
XX Synthetic.
OS
XX
XX MO9911787-A1.
PN
XX
XX 11-MAR-1999.
PD
XX
XX 02-SEP-1998; 98WO-JP003920.
PF
XX
XX 02-SEP-1997; 97JP-00254250.
PR 15-OCT-1997; 97JP-00299407.
PR 08-APR-1998; 98JP-00114135.
XX
XX (SUMU ) SUMITOMO PHARM CO LTD.
PA
XX
XX Harada H, Fujiwara M, Tagashira S, Ogawa S, Katsumata T;
PI Nakatsuka M;
XX
XX WPI; 1999-243621/20.
DR
XX
XX DNA regulating expression of PEBP2 alphaA gene to produce regulator
PT protein, useful as promoter for prevention or/and treatment of bone
PT diseases e.g. osteoporosis.
XX
XX Example 6; Page 39; 118bp; Japanese.
PS
XX
XX The present invention describes DNA which participates in the regulation
CC of expression of PEBP2 alpha A gene. The DNA produces a regulator protein
CC with the activity of promoting bone formation and can serve as a promoter
CC for prevention and treatment of bone diseases including osteoporosis. The
CC present sequence represents a PCR primer used in an example from the
CC present invention
XX
XX
XX Sequence 25 BP; 14 A; 5 C; 4 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 4.5e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 5404 AAAAAAATAATGAAATTAAGG 5427
DB 2 ACMAAGCAAAATGACAAATCAAGG 25
RESULT 305
AAC96663/c
ID AAC96663 standard; DNA; 25 BP.
XX
XX AAC96663;
AC
XX
XX 26-FEB-2001 (first entry)
DT
XX
XX HLA HLA-A gene PCR primer #40.
DE
XX
XX DNA sequence analysis; sequencing; protein sequence; protein structure;
KW gene typing; organ donation; bacteria identification; 16S rRNA; HLA;
KW human leukocyte antigen; PCR primer; ss.
XX
XX Homo sapiens.
OS
XX
XX MO2000065088-A2.
PN
XX
XX 02-NOV-2000.
PD
XX
XX 20-APR-2000; 2000MO-EP003636.
PF
```

XX 26-APR-1999; 99BP-00303215.
XX (AMSH) AMERSHAM PHARMACIA BIOTECH AB.
XX uifendahl P, Wong K;
XX WPI; 2000-679677/66.
XX
XX Identifying extendible primers for use in identification, or
XX classification of a nucleic acid of an organism, allele or gene such as
XX class 1/2 HLA comprises identifying all possible nucleotide sequences of
XX specific length.
XX
XX Claim 14; Page 55; 66pp; English.
XX
XX The present invention provides a method for identifying a set of
XX extendible primers which can be used in the identification, typing and
XX classification of genes. This can then be used to predict protein
XX sequence and structure, in organ donation to match the organ with the
XX receiver, and to identify bacteria in a sample. The method can be used to
XX type the human leukocyte antigen genes (HLA) and 16S rRNA genes in
XX particular
XX
XX Sequence 25 BP; 2 A; 3 C; 2 G; 18 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.3%; Score 17.6; DB 1; Length 25;
XX Best Local Similarity 83.3%; Pred. No. 4.5e+02;
XX Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 5392 TAAAAAATACAAAAAGAAAAA 5415
Db 24 TGAAGAAATACAAAAA 1
RESULT 306
ABN13298
ID ABN13298 standard; DNA; 25 BP.
AC ABN13298;
XX
XX 29-MAY-2002 (first entry)
DT
XX
XX Human GDMLP-1 25-mer scanning SEQ ID NO:5 sequence SEQ ID NO:13290.
DB
XX
XX Human; genome-derived myosin-like protein 1; GDMLP-1; heart;
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
XX skeletal muscle disorder; amplicon; screening; ss.
XX
XX Homo sapiens.
XX
XX WO200192524-A2.
PN
XX
XX 06-DEC-2001.
PD
XX
XX 25-MAY-2001; 2001WO-US016981.
PF
XX
XX 26-MAY-2000; 2000US-0207456P.
XX 21-SEP-2000; 2000US-0234687P.
XX 27-SEP-2000; 2000US-0236359P.
XX 04-OCT-2000; 2000GB-00024263.
XX 30-JAN-2001; 2001WO-US000661.
XX 30-JAN-2001; 2001WO-US000662.
XX 30-JAN-2001; 2001WO-US000663.
XX 30-JAN-2001; 2001WO-US000664.
XX 30-JAN-2001; 2001WO-US000665.
XX 30-JAN-2001; 2001WO-US000666.
XX 30-JAN-2001; 2001WO-US000667.
XX 30-JAN-2001; 2001WO-US000668.
XX 30-JAN-2001; 2001WO-US000669.
XX 30-JAN-2001; 2001WO-US000670.
XX 05-FEB-2001; 2001US-0266860P.
XX

PA (AEOM-) AEOMICA INC.
XX
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
XX PT or as specific biomolecule capture probes for surface-enhanced laser
XX desorption/ionization, comprises human myosin-like protein hGDMLP-1.
XX
XX Disclosure; SEQ ID NO 13290; 214pp; English.
XX
XX
XX The present invention describes a human genome-derived myosin-like
XX protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
XX 1 can be used in gene therapy and vaccine production. The hGDMLP-1
XX nucleic acids can be used as probes to detect, characterize and quantify
XX hGDMLP-1 nucleic acids in samples, as amplification substrates, to
XX provide initial substrates for the recombinant engineering of hGDMLP-1
XX protein variants having desired phenotypic improvements, and for
XX expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
XX used as immunogens to raise antibodies that specifically recognize hGDMLP-
XX 1 proteins, as standards in assays used to determine the concentration
XX and/or amount specifically of hGDMLP proteins, as specific biomolecule
XX capture probes for surface-enhanced laser desorption/ionization, as
XX therapeutic supplement in patients having specific deficiency in hGDMLP-1
XX production, and in vaccines or for replacement therapy. The
XX polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
XX disorder associated with the expression of hGDMLP-1, in particular heart
XX and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
XX The present sequence represents an oligomer used in the screening of the
XX hGDMLP-1 sequence in the exemplification of the present invention. N.B.
XX The sequence data for this patent did not form part of the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequence
SQ
XX
XX Sequence 25 BP; 8 A; 3 C; 11 G; 3 T; 0 U; 0 Other;
Qy 3475 AGCAGACGAGAACCAAGTGATG 3498
Db 2 AGCAGAGTAGACCAAGTGATGAG 25
RESULT 307
ABN12957
ID ABN12957 standard; DNA; 25 BP.
AC ABN12957;
XX
XX 29-MAY-2002 (first entry)
DT
XX
XX Human GDMLP-1 25-mer scanning SEQ ID NO:5 sequence SEQ ID NO:12949.
DB
XX
XX Human; genome-derived myosin-like protein 1; GDMLP-1; heart;
XX muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
XX skeletal muscle disorder; amplicon; screening; ss.
XX
XX Homo sapiens.
XX
XX WO200192524-A2.
PN
XX
XX 06-DEC-2001.
PD
XX
XX 25-MAY-2001; 2001WO-US016981.
PF
XX
XX 26-MAY-2000; 2000US-0207456P.
XX 21-SEP-2000; 2000US-0234687P.
XX 27-SEP-2000; 2000US-0236359P.
XX 04-OCT-2000; 2000GB-00024263.
XX 30-JAN-2001; 2001WO-US000661.
XX

XX	29-MAY-2002	(first entry)	
DT			
XX	Human GDMLP-1 25-mer scanning SEQ ID NO:4 sequence SEQ ID NO:4831.		
XX			
DE	Human, genome-derived myosin-like protein 1; hGDMLP-1; heart;		
XX	muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;		
KW	skeletal muscle disorder; amplicon; screening; 88.		
XX			
OS	Homo sapiens.		
XX			
FN	WO200192524-A2.		
XX			
PD	06-DEC-2001.		
XX			
PP	25-MAY-2001; 2001WO-US016981.		
XX			
PR	26-MAY-2000; 2000US-0207456P.		
PR	21-SEP-2000; 2000US-0234687P.		
PR	27-SEP-2000; 2000US-0236359P.		
PR	04-OCT-2000; 2000GB-00024263.		
PR	30-JAN-2001; 2001WO-US000661.		
PR	30-JAN-2001; 2001WO-US000662.		
PR	30-JAN-2001; 2001WO-US000663.		
PR	30-JAN-2001; 2001WO-US000664.		
PR	30-JAN-2001; 2001WO-US000665.		
PR	30-JAN-2001; 2001WO-US000666.		
PR	30-JAN-2001; 2001WO-US000667.		
PR	30-JAN-2001; 2001WO-US000668.		
PR	30-JAN-2001; 2001WO-US000669.		
PR	30-JAN-2001; 2001WO-US000670.		
PR	05-FEB-2001; 2001US-0266860P.		
PA			
PA	(AECM-) AEOMICA INC.		
FI			
FI	Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;		
XX			
DR	WPI; 2002-179446/23.		
XX			
PT	New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,		
PT	or as specific biomolecule capture probes for surface-enhanced laser		
PT	desorption ionization, comprises human myosin-like protein hGDMLP-1.		
XX			
PS	Disclosure; SEQ ID NO 4831; 214pp; English.		
XX			
CC	The present invention describes a human genome-derived myosin-like		
CC	protein 1 (hGDMLP-1). The protein and vaccine production. The hGDMLP-1		
CC	1 can be used in gene therapy and vaccine production. The hGDMLP-1		
CC	nucleic acids can be used as probes to detect, characterise and quantify		
CC	hGDMLP-1 nucleic acids in samples, as amplification substrates, to		
CC	provide initial substrates for the recombinant engineering of hGDMLP-1		
CC	protein variants having desired phenotypic improvements, and for		
CC	expressing the proteins. The hGDMLP-1 proteins or polypeptides may be		
CC	used as immunogens to raise antibodies that specifically recognise hGDMLP		
CC	-1 proteins, as standards in assays used to determine the concentration		
CC	and/or amount specifically of hGDMLP proteins, as specific biomolecule		
CC	capture probes for surface-enhanced laser desorption ionisation, as		
CC	therapeutic supplement in patients having specific deficiency in hGDMLP-1		
CC	production, and in vaccines or for replacement therapy. The		
CC	polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a		
CC	disorder associated with the expression of hGDMLP-1, in particular heart		
CC	and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.		
CC	The present sequence represents an oligomer used in the screening of the		
CC	hGDMLP-1 sequence for the exemplification of the present invention. N.B.		
CC	specific sequence data for this patent did not form part of the printed		
CC	specification, but was obtained in electronic format directly from WIPO		
CC	at ftp.wipo.int/pub/published_pct_sequence		
XX			
SO	Sequence 25 BP; 4 A; 8 C; 7 G; 6 T; 0 U; 0 Other;		
XX			
Query Match	0.3%;	Score 17.6;	DB 1; Length 25;
Best Local Similarity	83.3%;	Pred. No. 4,5e+02;	
Matches 20; Conservative	0;	Mismatches 4;	Indels 0; Gaps 0;

Cy		AGGACCTGGCCTTCGTGCCTACTAGTG	3280
Dn			
	2	AGAACCCTGCCCTCTCATCACTAGT	25
RESULT_310			
ID	ABN12958		
XX AC	standard; DNA;	25 BP.	
DT DT	ABN12958;		
DE DE	29-MAY-2002	(first entry)	
KW KW	Human GDMMP-1	25-mer scanning SEQ ID NO:5 sequence SEQ ID NO:12950.	
XV XV	muscle; myosin; chromosome 22;	gene therapy; vaccine; heart disease;	
OS OS	skeletal muscle disorder;	amplicon; screening; ss.	
PB PB	Homo sapiens.		
PP PP	WO200192524-A2.		
R PR	06-DEC-2001.		
S PR	25-MAY-2001;	2001WO-US016981.	
T PR	26-MAY-2000;	2000US-0207456P.	
V PR	21-SEP-2000;	2000US-0234687P.	
X PR	27-SEP-2000;	2000US-0236359P.	
Y PR	04-OCT-2000;	2000GB-0002426J.	
Z PR	30-JAN-2001;	2001WO-US000661.	
A PR	30-JAN-2001;	2001WO-US000662.	
B PR	30-JAN-2001;	2001WO-US000663.	
C PR	30-JAN-2001;	2001WO-US000664.	
D PR	30-JAN-2001;	2001WO-US000665.	
E PR	30-JAN-2001;	2001WO-US000666.	
F PR	30-JAN-2001;	2001WO-US000667.	
G PR	30-JAN-2001;	2001WO-US000668.	
H PR	30-JAN-2001;	2001WO-US000669.	
I PR	30-JAN-2001;	2001WO-US000670.	
J PR	05-FEB-2001;	2001US-0266860P.	
K PA	(AEOM-) AEOMICA INC.		
L PI	Gu Y,	Uf Y,	Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
M PT	WIPI;	2002-179446/23.	
N RX	New polypeptide,	for raising antibodies that recognise hGDMLP-1 proteins,	
O TX	or as specific biomolecule capture probes for surface-enhanced laser	detection ionization,	comprises human myosin-like protein hGDMLP-1.
P XX	Description; SEQ ID NO 12950;	214dp; English.	
Q CC	The present invention describes a human genome-derived myosin-like	protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-	
R CC	1 can be used in gene therapy and vaccine production. The hGDMLP-1	nucleic acids can be used as probes to detect, characterise and quantify	
S CC	hGDMLP-1 nucleic acid samples, as amplification substrates, to	provide initial substrates for the recombinant engineering of hGDMLP-1	
T CC	proteins having desired phenotypic improvements, and for	expressing the proteins. The hGDMLP-1 proteins or polypeptides may be	
U CC	used as immunogens to raise antibodies that specifically recognise hGDMLP-	-1 proteins, as standards in assays used to determine the concentration	
V CC	and/or amount specifically of hGDMLP proteins, as specific biomolecule	capture probes for surface-enhanced laser desorption/ionisation, as	
W CC	therapeutic supplement in patients having specific deficiency in hGDMLP-1	production, and in vaccines or for replacement therapy. The	
X CC	polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a	disorder associated with the expression of hGDMLP-1, in particular heart	
Y CC	and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.		

CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 25 BP; 10 A; 5 C; 8 G; 2 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 4.5e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 2112 GATGCGCGATGAGCGGAGGA 2135
1 GATGAGCAGATGACCAAGAGGA 24
DB
RESULT 311
ABN13300
ID ABN13300 standard; DNA; 25 BP.
XX
AC ABN13300;
XX
XX 29-MAY-2002 (first entry)
DE Human GDMLP-1 25-mer scanning SEQ ID NO:5 sequence SEQ ID NO:13292.
XX
XX Human; genome-derived myosin-like protein 1; GDMLP-1; heart;
KM muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KM skeletal muscle disorder; amplicon; screening; ss.
OS Homo sapiens.
XX
XX WO200192524-A2.
XX
XX 06-DEC-2001.
PD
XX 25-MAY-2001; 2001WO-US016981.
PF
XX 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon MR;
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
XX
XX Disclosure; SEQ ID NO 13292; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMLP-1

CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionization, as
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMLP-1, in particular heart
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 25 BP; 8 A; 3 C; 11 G; 3 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 4.5e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 3476 GCAGACGGAACCAAGTGTGATGA 3499
1 GCAGAGTGAAGCCAGTGTGAGGA 24
DB
RESULT 312
ABV80871
ID ABV80871 standard; DNA; 25 BP.
XX
XX ABV80871;
AC
XX
XX 03-JAN-2003 (first entry)
DE Human HTPPL scanning oligonucleotide SEQ ID 2117.
XX
XX Human; gene therapy; tumour suppressor; HTPPL; chromosome 10p12.1;
KM human testis expressed Patched like protein; testis; adrenal; liver;
KM male germ cell development; bone marrow; brain; kidney; lung; placenta;
KM prostate; skeletal muscle; colon; male infertility; cancer; ss.
OS Homo sapiens.
XX
XX EF1229046-A2.
XX
XX 07-AUG-2002.
PD
XX 28-JAN-2002; 2002EP-00001167.
PF
XX 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 09-OCT-2001; 2001US-0327898P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Zhan J;
XX WPI; 2002-676582/73.
XX
XX Novel isolated human testis expressed Patched like protein (HTPPL), useful
PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPPL.
XX
XX Example 2; Page 341; 718pp; English.
XX
XX The present invention relates to human testis expressed Patched like

CC protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL
 CC has two isoforms, with a few single base pair differences between the
 CC two. One of the single base pair changes introduces a premature stop
 CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
 CC shares an overall structure organisation with the Patched protein. The
 CC shared structural features strongly imply that HTPL plays a role similar
 CC to that of Patched, and is a potential tumour suppressor. HTPL is
 CC important in regulating male germ cell development, and the HTPL gene was
 CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
 CC useful for diagnosing a disorder caused by mutation in HTPL, and in
 CC therapy and manufacture of a medicament for treatment or prevention of
 CC such disorder associated with decreased expression or activity of human
 CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
 CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
 CC clinically useful diagnostic markers and potential therapeutic agents for
 CC male infertility and cancer. The present oligonucleotide was used in an
 CC example from the invention

XX Sequence 25 BP; 4 A; 10 C; 11 G; 0 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.6; DB 1; Length 25;

Best Local Similarity 83.3%; Pred. No. 4.5e+02;

Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 770 GCGCCAGCCGAGGAGGCGAG 793

Db 2 GAGCCCAAGCCGAGCGGCGCGG 25

RESULT 313

ABSV5628

ID ABSV5628 standard; DNA; 25 BP.

XX ABSV5628;

XX 27-DEC-2002 (first entry)

XX Human PAPP-Ba associated 25-mer SEQ ID 1154.

XX PAPP-E; human; pregnancy associated plasma protein E; abortive;

XX KW contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;

XX KM dysgenetic pregnancy; primer; ss.

XX OS Homo sapiens.

XX US2002102252-A1.

XX 01-AUG-2002.

XX 06-APR-2001; 2001US-00827998.

XX 26-MAY-2000; 2000US-0207456P.

XX (GUYY/) GU Y.

XX (SHAN/) SHANNON M B.

XX Gu Y, Shannon MB;

XX WPI; 2002-697817/75.

XX New isolated nucleic acid encoding an isoform of human pregnancy

XX associated plasma protein E, for preventing or aborting pregnancy.

XX Example 2; Page 227; 353pp; English.

XX This invention describes a novel isolated nucleic acid that encodes one

XX of three new isoforms of human pregnancy associated plasma protein E,

XX hPAPP-B. The products of the invention have abortive and contraceptive

XX activity and can be used for gene therapy or in a vaccine. The nucleic

XX acid, polypeptide encoded by it, or antibody to the polypeptide can be

XX used in pharmaceutical compositions or vaccines for preventing or

XX aborting pregnancy. PAPP-E is used in the antenatal diagnosis of

CC dysgenetic pregnancies. The nucleic acids are used as probes to assess
 CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the
 CC antibodies can be used to assess the expression levels of PAPP-E isoform
 CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
 CC antenatally. This sequence represents an oligomer used in scanning the
 CC human PAPP-E genes described in the disclosure of the invention

XX Sequence 25 BP; 15 A; 0 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.6; DB 1; Length 25;

Best Local Similarity 83.3%; Pred. No. 4.5e+02;

Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 5411 AAAATGAAATTAAGAAATTAAGA 5434

Db 1 AGAAATGAAATTAAGAAATTAAGA 24

RESULT 314

ABSV5626

ID ABSV5626 standard; DNA; 25 BP.

XX ABSV5626;

XX 27-DEC-2002 (first entry)

XX Human PAPP-Ba associated 25-mer SEQ ID 1152.

XX PAPP-E; human; pregnancy associated plasma protein E; abortive;

XX KW contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;

XX KM dysgenetic pregnancy; primer; ss.

XX OS Homo sapiens.

XX US2002102252-A1.

XX 01-AUG-2002.

XX 06-APR-2001; 2001US-00827998.

XX 26-MAY-2000; 2000US-0207456P.

XX (GUYY/) GU Y.

XX (SHAN/) SHANNON M B.

XX Gu Y, Shannon MB;

XX WPI; 2002-697817/75.

XX New isolated nucleic acid encoding an isoform of human pregnancy

XX associated plasma protein E, for preventing or aborting pregnancy.

XX Example 2; Page 226; 353pp; English.

XX This invention describes a novel isolated nucleic acid that encodes one

XX of three new isoforms of human pregnancy associated plasma protein E,

XX hPAPP-B. The products of the invention have abortive and contraceptive

XX activity and can be used for gene therapy or in a vaccine. The nucleic

XX acid, polypeptide encoded by it, or antibody to the polypeptide can be

XX used in pharmaceutical compositions or vaccines for preventing or

XX aborting pregnancy. PAPP-E is used in the disclosure of the invention

XX Sequence 25 BP; 16 A; 0 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.6; DB 1; Length 25;

Best Local Similarity 83.3%; Pred. No. 4.5e+02;

Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

```
QY          5410 AAAAAATGAAATTAAGAAATAG 5433
DB          2 AAGAAATGAAATTAAGAAATAG 25

RESULT 315
ADB02002/c
ID ADB02002 standard; DNA; 25 BP.
XX
AC ADB02002;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human MD23 scanning oligonucleotide SEQ ID 2988.
XX
KM Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX developmental disorder; ss.
XX
OS Homo sapiens.
XX
PN EP1281758-A2.
XX
PD 05-FEB-2003.
XX
PF 30-JUL-2002; 2002BP-00016874.
XX
PR 02-AUG-2001; 2001US-00922181.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M, Gu Y, Nguyen C;
XX
DR WPI; 2003-423107/40.
XX
PT New zinc finger-containing proteins and nucleic acids, useful in
XX manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MD23,
XX MD24, MD27 or MD212, e.g. cancer.
XX
PS Example 8; SEQ ID NO 2988; 103bp; English.
XX
CC The present invention relates to novel human zinc finger-containing
XX proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
XX encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
XX MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
XX 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
XX or in manufacturing a medicament for treating or preventing a disorder,
XX associated with decreased or increased expression or activity of MD23,
XX MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
XX acids and proteins are also useful for diagnosing or monitoring a disease
XX caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
XX acids can also be used as probes to detect and characterize gross
XX alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
XX useful in constructing microarrays for measuring gene expression. The
XX proteins are useful as therapeutic agents for gene therapy or as
XX vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 25 BP; 7 A; 7 C; 11 G; 0 T; 0 U; 0 Other;

Query Match          0.3%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 4.5e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY          4154 GCTTCTCCCGGATGAGTCCTCC 4177
DB          24 GCTTCTCCCGGATGAGTCCTCC 1

RESULT 316
ADB02001/c
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```
ID ADB02001 standard; DNA; 25 BP.
XX
AC ADB02001;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human MD23 scanning oligonucleotide SEQ ID 2987.
XX
KM Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX developmental disorder; ss.
XX
OS Homo sapiens.
XX
PN EP1281758-A2.
XX
PD 05-FEB-2003.
XX
PF 30-JUL-2002; 2002BP-00016874.
XX
PR 02-AUG-2001; 2001US-00922181.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M, Gu Y, Nguyen C;
XX
DR WPI; 2003-423107/40.
XX
PT New zinc finger-containing proteins and nucleic acids, useful in
XX manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MD23,
XX MD24, MD27 or MD212, e.g. cancer.
XX
PS Example 8; SEQ ID NO 2987; 103bp; English.
XX
CC The present invention relates to novel human zinc finger-containing
XX proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
XX encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
XX MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
XX 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
XX or in manufacturing a medicament for treating or preventing a disorder,
XX associated with decreased or increased expression or activity of MD23,
XX MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
XX acids and proteins are also useful for diagnosing or monitoring a disease
XX caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
XX acids can also be used as probes to detect and characterize gross
XX alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
XX useful in constructing microarrays for measuring gene expression. The
XX proteins are useful as therapeutic agents for gene therapy or as
XX vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 25 BP; 7 A; 7 C; 11 G; 0 T; 0 U; 0 Other;

Query Match          0.3%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 4.5e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY          4154 GCTTCTCCCGGATGAGTCCTCC 4177
DB          25 GCTTCTCCCGGATGAGTCCTCC 2

RESULT 317
ACK21062/c
ID ACK21062 standard; DNA; 25 BP.
XX
AC ACK21062;
XX
DT 14-OCT-2003 (first entry)
XX
DE Human microarray DNA oligonucleotide SEQ ID NO 121043.
XX
```

KM EST; 98; probe; expressed sequence tag; microarray; gene expression;
KM genetic variation; biallelic marker; polymorphism; human;
KM cross-species comparison.
OS Homo sapiens.
PN US2003104410-A1.
XX 05-JUN-2003.
PD 15-MAR-2002; 2002US-00098263.
PF 16-MAR-2001; 2001US-0276759P.
PR (AFPY-) APFYMETRIX INC.
XX (AFPY-) APFYMETRIX INC.
XX Miltmann MP;
XX WPI; 2003-567953/53.
DR WPI; 2003-567953/53.
XX New array of nucleic acid probes, useful for in situ hybridization, in
PT Southern, Northern or dot-blot hybridization to identify or detect the
PT sequence or specific mutations of any gene.
PS Claim 1; SEQ ID NO 121043; 9pp; English.
XX
XX The invention discloses a microarray comprising a plurality of nucleic
CC acid probes including one of 2,018,500 fully defined sequences, or its
CC perfect match, perfect mismatch, antisense match or antisense mismatch.
CC Also disclosed is a method of gene expression analysis. The array is used
CC in monitoring gene expression levels by hybridisation to a DNA library,
CC in analysis of genetic variation or in hybridisation of tag-labelled
CC compounds. The nucleic acid probes are specifically designed for analysis
CC of at least one target sequence. The method of analysis comprises
CC hybridising at least one or more nucleic acids to at least two or more
CC nucleic acid probes and detecting the hybridisation. The nucleic acid
CC probes are attached to a solid support. The analysis comprises monitoring
CC gene expression levels, identifying biallelic markers or polymorphisms,
CC or family members of a gene and a cross-species comparison. Each of the
CC nucleic acids further comprises a tag sequence. The array of nucleic acid
CC probes is useful in in situ hybridisation, in Southern, Northern or dot-
CC blot hybridisation to identify or detect the sequence or specific
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
CC primer extensions or in screening cDNA or genomic libraries or subclones
CC for additional subclones containing segments of DNA that have been
CC isolated and previously sequenced. The sequence presented is one of the
CC nucleic acid probes incorporated in the microarray. Note: The sequence
CC data for this patent can also be obtained in electronic format directly
CC from USPTO at seqdata.uspto.gov/sequence.html
XX
SQ Sequence 25 BP; 6 A; 9 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 4.5e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 559 TTGGAGTTCTCGAAGAGGAGGAG 582
DB 24 TTGGAGTTCTCGAAGAGGAGGAG 1
RESULT 318
AC140802/C
ID AC140802 standard; DNA, 25 BP.
XX
XX AC140802;
XX
XX 13-OCT-2003 (first entry)
XX
XX Human microarray DNA oligonucleotide SEQ ID NO 40793.
XX
XX EST; 98; probe; expressed sequence tag; microarray; gene expression;
KM genetic variation; biallelic marker; polymorphism; human;
XX

KM cross-species comparison.
XX
XX Homo sapiens.
OS
PN US2003104410-A1.
XX 05-JUN-2003.
PD 15-MAR-2002; 2002US-00098263.
PF 16-MAR-2001; 2001US-0276759P.
PR (AFPY-) APFYMETRIX INC.
XX (AFPY-) APFYMETRIX INC.
XX Miltmann MP;
XX WPI; 2003-567953/53.
DR WPI; 2003-567953/53.
XX New array of nucleic acid probes, useful for in situ hybridization, in
PT Southern, Northern or dot-blot hybridization to identify or detect the
PT sequence or specific mutations of any gene.
PS Claim 1; SEQ ID NO 40793; 9pp; English.
XX
XX The invention discloses a microarray comprising a plurality of nucleic
CC acid probes including one of 2,018,500 fully defined sequences, or its
CC perfect match, perfect mismatch, antisense match or antisense mismatch.
CC Also disclosed is a method of gene expression analysis. The array is used
CC in monitoring gene expression levels by hybridisation to a DNA library,
CC in analysis of genetic variation or in hybridisation of tag-labelled
CC compounds. The nucleic acid probes are specifically designed for analysis
CC of at least one target sequence. The method of analysis comprises
CC hybridising at least one or more nucleic acids to at least two or more
CC nucleic acid probes and detecting the hybridisation. The nucleic acid
CC probes are attached to a solid support. The analysis comprises monitoring
CC gene expression levels, identifying biallelic markers or polymorphisms,
CC or family members of a gene and a cross-species comparison. Each of the
CC nucleic acids further comprises a tag sequence. The array of nucleic acid
CC probes is useful in in situ hybridisation, in Southern, Northern or dot-
CC blot hybridisation to identify or detect the sequence or specific
CC mutations of any gene, in mapping the 5' termini of mRNA molecules by
CC primer extensions or in screening cDNA or genomic libraries or subclones
CC for additional subclones containing segments of DNA that have been
CC isolated and previously sequenced. The sequence presented is one of the
CC nucleic acid probes incorporated in the microarray. Note: The sequence
CC data for this patent can also be obtained in electronic format directly
CC from USPTO at seqdata.uspto.gov/sequence.html
XX
SQ Sequence 25 BP; 1 A; 7 C; 5 G; 12 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 4.5e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 4399 AAAGACAGAAAGATGACTCTG 4422
DB 24 AAAGACAGAAAGATGACTCTG 1
RESULT 319
ACK27097
ID ACK27097 standard; DNA, 25 BP.
XX
XX ACK27097;
XX
XX 14-OCT-2003 (first entry)
XX
XX Human microarray DNA oligonucleotide SEQ ID NO 127078.
XX
XX EST; 98; probe; expressed sequence tag; microarray; gene expression;
KM genetic variation; biallelic marker; polymorphism; human;
KM cross-species comparison.
XX

XX Homo sapiens.
XX
XX US2003104410-A1.
XX
XX 05-JUN-2003.
XX
XX 15-MAR-2002; 2002US-00098263.
XX
XX 16-MAR-2001; 2001US-0276759P.
XX
XX (AFFY-) AFFYMETRIX INC.
XX
XX Miltmann MP;
XX
XX WPI; 2003-567953/53.
XX
XX
XX New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence, or specific mutations of any gene.
XX
XX
XX Claim 1; SEQ ID NO 127078; 9pp; English.
XX
XX The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by hybridisation to a DNA library, in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises hybridising at least one or more nucleic acids to at least two or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying allelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dot-blot hybridisation to identify or detect the sequence or specific mutations of any gene, in mapping the 5' terminus of mRNA molecules by primer extensions or in screening cDNA or genomic libraries or subclones for additional subclones containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly from USPTO at seqdata.uspto.gov/sequence.html.
XX
XX Sequence 25 BP; 5 A; 8 C; 9 G; 3 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.3%; Score 17.6; DB 1; Length 25;
XX Best Local Similarity 83.3%; Pred. No. 4.5e+02;
XX Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0.
XX
XX 4547 GAGAGCAGCTGATTAAGCCGAGTGA 4570
XX |||||
XX 1 GAGAGCAGCGGCTCGCCGACTGA 24
XX
XX
XX RESULT 320
XX ACK28333/C
XX ID ACK28333 standard; DNA; 25 BP.
XX
XX ACK28333;
XX
XX 14-OCT-2003 (first entry)
XX
XX Human microarray DNA oligonucleotide SEQ ID NO 128314.
XX
XX EST; seq; probe; expressed sequence tag; microarray; gene expression;
XX genetic variation; allelic marker; polymorphism; human;
XX cross-species comparison.
XX
XX Homo sapiens.
XX

PN	US2003104410-A1.
XX	
PD	05-JUN-2003.
XX	
PP	15-MAR-2002; 2002US-00098263.
XX	
PR	16-MAR-2001; 2001US-026759P.
PA	(AFFY-) AFFYMETRIX INC.
XX	
PI	Miltmann MP;
XX	
PP	WPI; 2003-567953/53.
XX	
PT	New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.
PT	
PS	Claim 1; SEQ ID NO 128314; 9pp; English.
XX	
CC	The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by hybridisation to a DNA library, in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises hybridising at least one or more nucleic acids to at least two or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying diallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in situ hybridisation, in Southern, Northern or dot-blot hybridisation to identify or detect the sequence or specific mutations of any gene, in mapping the 5' termini of mRNA molecules by primers, extensions or in screening cDNA or genomic libraries or subclones for additional subclones containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly from USPTO at seqdata.uspto.gov/sequence.html
CC	
XX	Sequence 25 BP; 3 A; 9 C; 8 G; 5 T; 0 U; 0 Other;
XX	
CC	Query Match 0.3%; Score 17.6; DB 1; Length 25;
CC	Best Local Similarity 83.3%; Pred. No. 4.5e+02;
CC	Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY	4547 GAGAGCAGCTGATGCCCCGACTCA 4570
DB	25 GAGAGCAGCGGCTCGCCGACTGA 2
DB	
XX	RESULT 321
XX	ACH54326
XX	ACH54326 standard; DNA; 25 BP.
XX	ACH54326;
XX	
XX	16-OCT-2003 (first entry)
DB	DNA target sequence #3462 useful in array for genetic analyses.
XX	
XX	Gene expression analysis; array; hybridisation; genetic variation;
XX	tag-labelled compound; gene family; in situ hybridisation;
XX	library screening; Southern hybridisation; Northern hybridisation;
XX	dot-blot hybridisation; gene sequence; mutation detection;
XX	target sequence; probe; PCR; primer; ss.
XX	
XX	Unidentified.
XX	

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PN US2003082596-A1.
XX
XX 01-MAY-2003.
XX
XX 08-AUG-2002; 2002US-00215112.
XX
XX 08-AUG-2001; 2001US-0311040P.
XX
XX (MITT/) MITTMANN M.
XX
XX Miltmann M;
XX
XX WPI; 2003-576608/54.
XX
XX New probe array useful e.g. for monitoring gene expression levels, for
XX analyzing genetic variations, or for hybridizing tag-labeled compounds,
XX comprising multiple nucleic acid probes.
XX
XX Claim 1; SEQ ID NO 3462; 9pp; English.
XX
XX The present invention relates to nucleic acid sequences that are
XX complementary to particular genes, and can be used as probes for a
XX variety of analyses such as gene expression analysis. Each probe
XX comprises 9 or more consecutive nucleotides from at least one of 14936
XX nucleotide sequences defined in the patent, or their perfect sense match,
XX sense mismatch, antisense match or antisense mismatch oligonucleotides.
XX The probes may be used in an array comprising at least 10 distinct
XX nucleic acid probes. The array is useful in monitoring gene expression
XX levels by hybridisation to a DNA library, in analysing genetic
XX variations, and in hybridising tag-labelled compounds. The probes are
XX useful for identifying family members of a gene. The probes are also
XX useful in situ hybridisations, in screening cDNA or genomic libraries
XX (or derived subclones) for additional clones containing segments of DNA
XX that have been previously isolated and sequenced, in Southern, northern,
XX or dot-blot hybridisation of genomic DNA to identify or detect the
XX sequence of any gene or detect specific mutations in any gene, and in
XX mapping the 5' terminus of mRNA molecules by primer extensions. The
XX nucleic acid sequences of the invention are also useful as PCR primers.
XX The invention provides a large collection of nucleic acid sequences
XX complementary to particular genes with a wide range of analytical uses.
XX ACH50865-ACH65260 represent the target sequences of the invention. Note:
XX The sequence data for this patent was obtained in electronic format
XX directly from the USPTO web site at seqdata.uspto.gov/patpdiDentry.html
XX
XX Sequence 25 BP; 8 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 4.5e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 4293 CTCGATTCGGAAGAACTGAGCT 4316
DB 1 CTCCTTAAGGAAAGAACTGAGCT 24
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
RESULT 322
ADK65715/c
ID ADK65715 standard; DNA; 25 BP.
XX
XX ADK65715;
XX
XX 06-MAY-2004 (first entry)
XX
XX A thaliana 2-methyl-6-phytylhydroquinone methyltransferase PCR primer #3.
XX
XX vitamin E; 2-methyl-6-phytylhydroquinone methyltransferase; enzyme;
XX food processing; abiotic stress; ss; primer; PCR.
XX
XX Arabidopsis thaliana.
XX
XX DE10212703-A1.
XX
XX 02-OCT-2003.
XX

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XX
XX 21-MAR-2002; 2002DE-01012703.
XX
XX 21-MAR-2002; 2002DE-01012703.
XX
XX (SUNG-) SUNGENE GMBH & CO KGAA.
XX
XX Tropf S, Lemke R, Salchert K, Geiger M;
XX
XX WPI; 2004-215445/21.
XX
XX Preparation of Vitamin E, useful e.g. in foods and animal fodder.
XX comprises growing organisms, with increased activity of 2-methyl-6-
XX phytylhydroquinone methyltransferase.
XX
XX Example 2; Page 35; 48pp; German.
XX
XX The present invention relates to a method for preparing Vitamin E, which
XX comprises culturing an organism that has higher 2-methyl-6-
XX phytylhydroquinone methyltransferase activity than the wild type. The
XX method is used to produce transgenic organisms, particularly plants that
XX have increased Vitamin E content, useful in foods, fodder (or
XX supplements), for food processing, for preparing Vitamin E-containing
XX extracts, and for converting 2-methyl-6-(phytyl, solanese) or
XX geranylgeranylhydroquinones to the corresponding 2,3-dimethyl compounds.
XX Also, the method is used for producing plants with increased Vitamin E
XX content which have better resistance to abiotic stress. The present
XX sequence is a PCR primer used to isolate the A. thaliana 2-methyl-6-
XX phytylhydroquinone-methyltransferase gene.
XX
XX Sequence 25 BP; 4 A; 9 C; 7 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 4.5e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1201 TCAGAGAAAGCAGGCCCATG 1224
DB 24 TGAGAGTAAGTGTGGCCCATG 1
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
RESULT 323
AD081067/c
ID AD081067 standard; DNA; 25 BP.
XX
XX AD081067;
XX
XX 29-JUL-2004 (first entry)
XX
XX Cow prion protein microsatellite locus primer #79.
XX
XX gene typing; polymorphic microsatellite loci; PMU;
XX disease predisposition; microsatellite marker; prion disease;
XX cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
XX milk protein; hormone; transcription factor; pT-blue-vector; cow;
XX microsatellite; PCR; primer; ss.
XX
XX Bos taurus.
XX
XX DE10236711-A1.
XX
XX 26-FEB-2004.
XX
XX 09-AUG-2002; 2002DE-01036711.
XX
XX 09-AUG-2002; 2002DE-01036711.
XX
XX (UYHO-) UNITV HOHENHEIM.
XX
XX Geldermann H, Preuss S, Han Y;
XX
XX WPI; 2004-215730/21.
XX

```

PT Typing genes that contain polymorphic microsatellite loci, useful for
PT identifying predisposition to disease, by amplification and determining
XX length of amplicons.
PS Example 3; Page 28; 64pp; German.
XX
CC The invention describes a method of typing (M1) a gene (I) that has one
CC or more polymorphic microsatellite loci (PML). The method comprises: PCR
CC amplification of at least one DNA region of (I) that includes PML, using
CC as template a DNA sample containing at least one segment of (I); and
CC determining the length of the resulting amplicon(s). Also described are:
CC a method of determining (M2) microsatellite markers (MM) for
CC predisposition to a disease, associated with a gene that includes one or
CC more PML; and prediagnosis (M3) of diseases associated with gene that
CC include PML. The method is used to identify microsatellite markers, in a
CC disease-related gene, that are associated with a predisposition to
CC diseases and for prediagnosis of such diseases, especially prion diseases
CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
CC metabolic diseases; also to type genes that encode milk proteins,
CC hormones or transcription factors. The method is simpler, quicker and
CC particularly less expensive than known methods based on sequencing. This
CC sequence represents a primer used to genotype a region of the cow prion
CC protein (PrP) comprising a polymorphic microsatellite locus.
SQ Sequence 25 BP; 0 A; 3 C; 0 G; 22 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.6; DB 1; Length 25;
Best Local Similarity 83.3%; Pred. No. 4.5e+02;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 5398 AATGCAAAAGCAAAATGCAAA 5421
DB 25 AAAAAAAAAAGAAAGAAAAA 2

RESULT 324
AAZ71491/C
ID AAZ71491 standard; DNA; 19 BP.
XX
AC AAZ71491;
XX
DT 10-SRP-2001 (first entry)
XX
DE Human biallelic marker upstream amplification primer SEQ ID NO:5847.
XX
KW Human genome; biallelic marker; high density disequilibrium map;
XX genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
XX diagnosis; ss.
XX
OS Homo sapiens.
XX
XX
PN WO954500-A2.
XX
PD 28-OCT-1999.
XX
PF 21-APR-1999; 99WO-IB000822.
XX
PR 21-APR-1998; 98US-008261AP.
XX
PR 23-NOV-1998; 98US-0109732P.
XX
PA (GENT) GENSET.
XX
PI Cohen D, Blumenfeld M, Chumakov I;
XX
DR WPI; 2000-013267/01.
XX
PT Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX
PS Claim 8; Page 1477; 2745pp; English.
XX

CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
SQ Sequence 19 BP; 0 A; 7 C; 0 G; 12 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 4.5e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1181 GAGAAAGAGAGAGAGGAA 1199
DB 19 GAAAAAGAGAGAGAGGAA 1

RESULT 325
AAXS6904/C
ID AAXS6904 standard; RNA; 20 BP.
XX
AC AAXS6904;
XX
DT 15-JUL-1999 (first entry)
XX
DE WO9526733 target strand RNA 9.
XX
KW cleavage; oligonucleoside; target; inter-strand orientation; inhibitor;
XX disease; treatment; internucleotidyl bond cleavage; primer; ss.
XX
OS Synthetic.
XX
XX
PN WO9526733-A1.
XX
PD 12-OCT-1995.
XX
PF 31-MAR-1995; 95WO-US003920.
XX
PR 31-MAR-1994; 94US-00223355.
XX
PA (GENT-) GENTA INC.
XX
PI Arnold LJ, Reynolds MA, Schwartz DA, Daily WJ;
XX
DR WPI; 1995-358439/46.
XX
PT Oligo:nucleoside compounds for cleaving RNA - having a sequence that is
XX complementary to a target nucleic acid strand and a non-complementary
XX portion.
XX
PS Disclosure; Page 92; 109pp; English.
XX
XX
CC This invention describes a novel oligonucleoside compound for hybridising
CC to a target nucleic acid strand. The oligonucleoside comprises (a) an
CC oligonucleoside sequence that is complementary to a target region or
CC subregion of the target nucleic acid strand and (b) a portion that is non
CC -complementary to a target site in the target region or subregion such
CC that, when the oligonucleoside compound is hybridised to the target
CC strand, a base group at the site is oriented away from an inter-strand
CC orientation. The oligonucleoside and combinations are used for inhibiting
CC production of a selected protein in a cell by effecting cleavage at a
CC site in a target region of cellular RNA that codes for the selected
CC protein. They can be used for treating a condition in a mammal that is

CC caused by the production of a selected protein. The oligonucleosides are
CC target-RNA-specific and can be used against mRNA specific to a
CC particular disease state. They are relatively harmless to non-targeted
CC nucleic acid. The non-complementary unit enhances internucleotidyl bond
CC cleavage

SO Sequence 20 BP; 1 A; 9 C; 1 G; 0 T; 9 U; 0 Other;

Query Match 0.3%; Score 17.4; DB 1; Length 20;

Best Local Similarity 94.7%; Pred. No. 4.6e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1179 CAGAGAAAGAGAGAGAG 1197

Db 20 CAGAGAGAGAGAGAGAG 2

RESULT 326

AAS97830/c

AAS97830 standard; DNA; 20 BP.

AAS97830;

12-MAR-2002 (first entry)

Murine SACL gene-specific oligonucleotide PCR primer #397.

Human; mouse; SACL; carbohydrate; sweetener; ethanol; alcoholism; ss;
obesity; diabetes; transgenic embryo; body tissue; body fluid; pancreas;
blood; tongue; PCR primer; anorectic; antidiabetic; gene therapy;

protein replacement therapy.

Mus sp.

WO200183749-A2.

08-NOV-2001.

25-APR-2001; 2001WO-US013387.

28-APR-2000; 2000US-0200794P.

28-JUL-2000; 2000US-0221419P.

10-NOV-2000; 2000US-0247443P.

(WARN) WARNER LAMBERT CO.
(MONB-) MONELL CHEM SENSES CENT.

Bachanov AA, Beauchamp GK, Chatterjee A, De Jong PJ, Li S, Li X;
Ohmen JD, Reed DR, Ross D, Tordoff MG;

WPI; 2002-075162/10.

Novel isolated polypeptide comprising variant form of mouse or human SACL
polypeptide, and is associated with altered preference for carbohydrates
or other sweeteners, useful for preventing obesity, diabetes, alcoholism.

Claim 14; Page 89; 239pp; English.

The invention relates to an isolated polypeptide, comprising a variant
form of mouse or human SACL polypeptide. The variant form is associated
with altered preference for carbohydrates, other sweeteners or ethanol.
The polypeptide and its associated DNA sequence can be produced by
recombinant techniques and is useful for preventing obesity, diabetes or
alcoholism associated with SACL expression. The sequences are useful in
screening for drugs and sweeteners. Recombinant cell lines and transgenic
embryos may be used in screening for and identifying agents that induce
or repress function of SACL. Predisposition to diabetes, obesity or
alcoholism can be ascertained by testing any fluid or tissue of a human
(such as blood, pancreas or tongue) for sequence variations of the SACL
gene. A sequence variation of the SACL locus may indicate a
predisposition to diabetes, obesity and/or alcoholism and may provide a
diagnostic mark. The polynucleotide can be detected in a biological
sample by contacting the DNA with a probe to form a hybridisation complex

CC which is then detected. The sequences represent cDNA encoding human and
CC mouse SACL polypeptides and PCR primers specific for the SACL genes
XX

SO Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 4.6e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3124 ACCGAGCTGAGCTGAGCT 3142

Db 19 ACCGAGCTGAGCTGAGCT 1

RESULT 327

AAS97852/c

AAS97852 standard; DNA; 20 BP.

AAS97852;

12-MAR-2002 (first entry)

Murine SACL gene-specific oligonucleotide PCR primer #419.

Human; mouse; SACL; carbohydrate; sweetener; ethanol; alcoholism; ss;
obesity; diabetes; transgenic embryo; body tissue; body fluid; pancreas;
blood; tongue; PCR primer; anorectic; antidiabetic; gene therapy;

protein replacement therapy.

Mus sp.

WO200183749-A2.

08-NOV-2001.

25-APR-2001; 2001WO-US013387.

28-APR-2000; 2000US-0200794P.

28-JUL-2000; 2000US-0221419P.

10-NOV-2000; 2000US-0247443P.

(WARN) WARNER LAMBERT CO.
(MONB-) MONELL CHEM SENSES CENT.

Bachanov AA, Beauchamp GK, Chatterjee A, De Jong PJ, Li S, Li X;
Ohmen JD, Reed DR, Ross D, Tordoff MG;

WPI; 2002-075162/10.

Novel isolated polypeptide comprising variant form of mouse or human SACL
polypeptide, and is associated with altered preference for carbohydrates
or other sweeteners, useful for preventing obesity, diabetes, alcoholism.

Claim 14; Page 90; 239pp; English.

The invention relates to an isolated polypeptide, comprising a variant
form of mouse or human SACL polypeptide. The variant form is associated
with altered preference for carbohydrates, other sweeteners or ethanol.
The polypeptide and its associated DNA sequence can be produced by
recombinant techniques and is useful for preventing obesity, diabetes or
alcoholism associated with SACL expression. The sequences are useful in
screening for drugs and sweeteners. Recombinant cell lines and transgenic
embryos may be used in screening for and identifying agents that induce
or repress function of SACL. Predisposition to diabetes, obesity or
alcoholism can be ascertained by testing any fluid or tissue of a human
(such as blood, pancreas or tongue) for sequence variations of the SACL
gene. A sequence variation of the SACL locus may indicate a
predisposition to diabetes, obesity and/or alcoholism and may provide a
diagnostic mark. The polynucleotide can be detected in a biological
sample by contacting the DNA with a probe to form a hybridisation complex
which is then detected. The sequences represent cDNA encoding human and
mouse SACL polypeptides and PCR primers specific for the SACL genes

CC failure, muscular dystrophy and hypertension) CAGN22 nucleic acid is
 CC useful as primers and probes for detecting presence of nucleic acid
 CC sequence encoding at least a portion of calcium channel protein, in
 CC detection, identification and isolation of alpha2delta sequences
 CC diagnosing and typing of preneoplasias and cancers, since genetic
 CC disruption of 3p21.3 region (in which the alpha 2delta gene is located)
 CC is common in cancer (e.g. lung cancer and breast cancer) and
 CC preneoplastic lesion (e.g. hyperplasia, dysplasia, carcinoma in situ).
 CC The present is an SSCP (single strand change polymorphism) PCR primer
 CC used to detect polymorphisms in sequences encoding a human calcium
 CC channel alpha2delta splice isoform protein
 CC
 SQ Sequence 20 BP, 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
 Query Match 0.3%; Score 17.4; DB 1; Length 20;
 Best Local Similarity 94.7%; Pred. No. 4.6e+02;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 5074 CTGCTGCGCCACAGCAGCCA 5092
 Db 1 CTGCTGCGCCACAGCAGCTCA 19
 RESULT 330
 ACD25699
 ID ACD25699 standard; DNA; 20 BP.
 AC ACD25699;
 AC
 DT 26-AUG-2003 (first entry)
 DE Human calcium channel alpha2delta SSCP primer MUR8F.
 XX
 XX Human; 8p; PCR; calcium channel alpha2delta; chromosome 3p21.3; primer;
 KW transgenic; cancer; lung cancer; small cell carcinoma; epilepsy; stroke;
 KW non-small cell carcinoma; breast cancer; nasopharyngeal cancer;
 KW cervical cancer; head and neck cancer; neurological disease;
 KW brain trauma; Alzheimer's disease; multifactor dementia; seizure;
 KW amyotrophic lateral sclerosis; convulsions; Huntington's disease;
 KW amnesia; cardiovascular disease; cardiac arrhythmia; angina pectoris;
 KW hypoxic damage; ischemia; myocardial infarction; SSCP;
 KW congestive heart failure; Lambert-Raton myasthenic syndrome;
 KW single strand conformation polymorphism.
 KW
 OS Homo sapiens.
 XX
 XX US2003044911-A1.
 PN
 XX
 PD 06-MAR-2003.
 XX
 XX 05-APR-2002; 2002US-00116949.
 PF
 XX 30-DEC-1998; 98US-0114359P.
 PR 22-DEC-1999; 99US-00470443.
 PR
 XX
 XX (LEHM/) LERMAN M I.
 PA (LATI/) LATIF F.
 PA (WEIM/) WEI M.
 PA (DUHF/) DUH F.
 PA (MINN/) MINNA J D.
 PA (SEKI/) SEKIDO Y.
 PA (GAOB/) GAO B.
 PA
 PI Lerman MI, Latif F, Wei M, DuH F, Minna JD, Sekido Y, Gao B,
 XX
 XX WPI; 2003-492262/46.
 DR
 XX
 XX New substantially pure human calcium channel alpha2delta subunit splice
 PT isoform 1, 2 and 3 sequence useful in preventing, treating and diagnosing
 PT cancer, neurological disorders and cardiovascular disease.
 XX
 PS Example 7; Page 25; 79pp; English.
 XX

CC The invention relates to a substantially purified amino acid sequence
 CC comprising at least a portion of human calcium channel alpha2delta
 CC subunit splice isoform 1, splice isoform 2 sequence or splice isoform 3,
 CC or their variants, and their encoding nucleic acids (or their
 CC complements), variants, or homologues). Also included are screening a test
 CC compound for modulating calcium channel activity, an antibody which binds
 CC to the calcium channel or its variants and producing a transgenic non-
 CC human animal (where the animal expresses a reduced level of calcium
 CC channel alpha 2delta subunit relative to a corresponding wild-type
 CC animal). The calcium channel proteins are useful for generating an
 CC antibody (which is useful for detecting the proteins or their portions).
 CC The transgenic animal (preferably a rodent e.g. mouse) is useful for
 CC identifying a therapeutic compound for treating a transgenic animal
 CC having cancer, especially lung cancer (small cell carcinoma or non-small
 CC cell carcinoma), breast cancer, nasopharyngeal cancer, cervical cancer,
 CC head and neck cancer, a neurological disease, especially epilepsy,
 CC stroke, brain trauma, Alzheimer's disease, multifactor dementia,
 CC amyotrophic lateral sclerosis, convulsions, seizures, Huntington's
 CC disease, and amnesia, a cardiovascular disease, especially cardiac
 CC arrhythmia, angina pectoris, hypoxic damage to the cardiovascular system,
 CC ischemic damage to the cardiovascular system, myocardial infarction, and
 CC congestive heart failure, or Lambert-Raton myasthenic syndrome. The
 CC proteins and nucleic acids are useful in the diagnosis, prevention and
 CC treatment of the above mentioned diseases. The human gene for the calcium
 CC channel is located on chromosome 3p21.3. The present sequence is an SSCP
 CC (single strand conformation polymorphism) primer used to detect
 CC polymorphisms in the calcium channel alpha2delta subunit gene
 CC
 SQ Sequence 20 BP, 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
 Query Match 0.3%; Score 17.4; DB 1; Length 20;
 Best Local Similarity 94.7%; Pred. No. 4.6e+02;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 5074 CTGCTGCGCCACAGCAGCCA 5092
 Db 1 CTGCTGCGCCACAGCAGCTCA 19
 RESULT 331
 ADJ61323/c
 ID ADJ61323 standard; DNA; 20 BP.
 AC ADJ61323;
 AC
 DT 06-MAY-2004 (first entry)
 DE Oligonucleotide associated to IL5R-X61176 #15.
 XX
 XX interleukin; IL-4 receptor; IL-5 receptor; lung disease;
 KW airway inflammation; allergy; asthma; impeded respiration;
 KW cystic fibrosis; acute respiratory distress syndrome;
 KW pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
 KW 88.
 KW
 OS Homo sapiens.
 XX
 XX WO2004011613-A2.
 PN
 XX
 XX 05-FEB-2004.
 PD
 XX 25-JUL-2003; 2003WO-US023509.
 PF
 XX 29-JUL-2002; 2002US-0399076P.
 PR
 XX
 XX (EPIC-) EPIGENESIS PHARM INC.
 PA
 PI Nyce JW, Tang L, Sandrasagra A, Aguilar D, Miller S,
 PI Shahbuddin S, Lu H, Cong H,
 XX
 XX WPI; 2004-203534/19.
 DR
 XX
 XX Novel single or multiple target oligonucleotide anti-sense to e.g.
 PT

PT initiation codons and introns of respiratory disease-relevant genes e.g.,
PT CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
PT disease e.g., asthma.
XX
PS Claim 2; SEQ ID NO 2179; 85pp; English.
XX
CC The present invention relates to an oligonucleotide anti-sense to e.g.,
CC initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
CC end of nucleic acid target comprising gene(s) chosen from e.g.
CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the
CC oligonucleotide and optionally surfactant operatively linked to the
CC oligonucleotide. The method is useful for preventing or treating a
CC respiratory or lung disease, which involves administering to the airways
CC of a subject an effective amount of an inhibitor. The oligonucleotide is
CC useful for production of a medicament for the prevention and/or treatment
CC of a respiratory or lung disease. The respiratory or lung disease is
CC chosen from airway inflammation, allergy(ies), asthma, impeded
CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
CC obstruction. The present sequence represents an oligonucleotide of the
CC invention.
XX
SQ Sequence 20 BP; 0 A; 10 C; 0 G; 10 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 4.6e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1180 AGAGAGAAGAGAGAGAGA 1198
DB 19 AGAGAGAGAGAGAGAGA 1
RESULT 332
ADJ61322/C
ID ADJ61322 standard; DNA; 20 BP.
XX
AC ADJ61322;
XX
DT 06-MAY-2004 (first entry)
XX
DE Oligonucleotide associated to IL5R-X61176 #14.
XX
XX interleukin, IL-4 receptor; IL-5 receptor; lung disease;
XX airway inflammation; allergy; asthma; impeded respiration;
XX cystic fibrosis; acute respiratory distress syndrome;
XX pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
XX ss.
XX
XX Homo sapiens.
XX
XX MO2004011613-A2.
XX
XX 05-FEB-2004.
XX
XX 25-JUL-2003; 2003WO-US023509.
XX
XX 29-JUL-2002; 2002US-0399076P.
XX
XX (EPIC-) EPIGENESIS PHARM INC.
XX
XX Myce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;
XX Shahabuddin S, Lu H, Cong H;
XX WPI, 2004-203534/19.
XX
XX Novel single or multiple target oligonucleotide anti-sense to e.g.,
XX initiation codons and introns of respiratory disease-relevant genes e.g.,
XX CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
XX disease e.g., asthma.
XX
XX Claim 2; SEQ ID NO 2178; 85pp; English.

XX
CC The present invention relates to an oligonucleotide anti-sense to e.g.,
CC initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
CC end of nucleic acid target comprising gene(s) chosen from e.g.
CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the
CC oligonucleotide and optionally surfactant operatively linked to the
CC oligonucleotide. The method is useful for preventing or treating a
CC respiratory or lung disease, which involves administering to the airways
CC of a subject an effective amount of an inhibitor. The oligonucleotide is
CC useful for production of a medicament for the prevention and/or treatment
CC of a respiratory or lung disease. The respiratory or lung disease is
CC chosen from airway inflammation, allergy(ies), asthma, impeded
CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
CC obstruction. The present sequence represents an oligonucleotide of the
CC invention.
XX
SQ Sequence 20 BP; 2 A; 8 C; 0 G; 10 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 4.6e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1183 GAAGAGAGAGAGAGAAAT 1201
DB 20 GAGAGAGAGAGAGAGAAAT 2
RESULT 333
ADJ61324/C
ID ADJ61324 standard; DNA; 20 BP.
XX
AC ADJ61324;
XX
DT 06-MAY-2004 (first entry)
XX
DE Oligonucleotide associated to IL5R-X61176 #16.
XX
XX interleukin, IL-4 receptor; IL-5 receptor; lung disease;
XX airway inflammation; allergy; asthma; impeded respiration;
XX cystic fibrosis; acute respiratory distress syndrome;
XX pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
XX ss.
XX
XX Homo sapiens.
XX
XX MO2004011613-A2.
XX
XX 05-FEB-2004.
XX
XX 25-JUL-2003; 2003WO-US023509.
XX
XX 29-JUL-2002; 2002US-0399076P.
XX
XX (EPIC-) EPIGENESIS PHARM INC.
XX
XX Myce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;
XX Shahabuddin S, Lu H, Cong H;
XX WPI, 2004-203534/19.
XX
XX Novel single or multiple target oligonucleotide anti-sense to e.g.,
XX initiation codons and introns of respiratory disease-relevant genes e.g.,
XX CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
XX disease e.g., asthma.
XX
XX Claim 2; SEQ ID NO 2180; 85pp; English.
XX
XX The present invention relates to an oligonucleotide anti-sense to e.g.,
XX initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
XX end of nucleic acid target comprising gene(s) chosen from e.g.
XX interleukin (IL)-4 receptor, IL-5 receptor or salts of the

CC oligonucleotide and optionally surfactant operatively linked to the
 CC oligonucleotide. The method is useful for preventing or treating a
 CC respiratory or lung disease, which involves administering to the airways
 CC of a subject an effective amount of an inhibitor. The oligonucleotide is
 CC useful for production of a medicament for the prevention and/or treatment
 CC of a respiratory or lung disease. The respiratory or lung disease is
 CC chosen from allergy inflammation, allergy(ies), asthma, impeded
 CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
 CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
 CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
 CC obstruction. The present sequence represents an oligonucleotide of the
 CC invention.

CC Sequence 20 BP; 0 A; 10 C; 0 G; 10 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 17.4; DB 1; Length 20;
 Best Local Similarity 94.7%; Pred. No. 4.6e+02;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 1180 AGAGAAAGAGAGAGAGA 1198
 19 AGAGAGAGAGAGAGAGA 1

RESULT 334
 ADJ61325/C
 ID ADJ61325 standard; DNA; 20 BP.
 AC ADJ61325;
 XX
 XX 06-MAY-2004 (first entry)
 DT
 XX
 XX Oligonucleotide associated to IL5R-X61176 #17.
 DB
 XX
 XX Interleukin; IL-4 receptor; IL-5 receptor; lung disease;
 KW airway inflammation; allergy; asthma; impeded respiration;
 KM cystic fibrosis; acute respiratory distress syndrome;
 KM pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
 KM BB.
 XX
 XX Homo sapiens.
 OS
 XX
 XX MO2004011613-A2.
 PN
 XX
 XX 05-FEB-2004.
 PD
 XX
 XX 25-JUL-2003; 2003WC-US023509.
 PF
 XX
 XX 29-JUL-2002; 2002US-0399076P.
 PR
 XX
 XX (EPIC-) EPIGENESIS PHARM INC.
 PA
 XX
 XX Nyce JW, Tang L, Sandraagra A, Aguilar D, Miller S;
 PI Shahabuddin S, Lu H, Cong H;
 XX
 XX WPI; 2004-203534/19.
 DR
 XX
 XX Novel single or multiple target oligonucleotide anti-sense to e.g.
 PT initiation codons and introns of respiratory disease-relevant genes e.g.,
 PT CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
 PT disease e.g., asthma.
 PT
 XX
 XX Claim 2, SEQ ID NO 2181; 85bp; English.
 PS
 XX
 XX The present invention relates to an oligonucleotide anti-sense to e.g.,
 CC initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
 CC end of nucleic acid target comprising gene(s) chosen from e.g.
 CC Interleukin (IL)-4 receptor, IL-5 receptor or salts of the
 CC oligonucleotide and optionally surfactant operatively linked to the
 CC oligonucleotide. The method is useful for preventing or treating a
 CC respiratory or lung disease, which involves administering to the airways
 CC of a subject an effective amount of an inhibitor. The oligonucleotide is
 CC useful for production of a medicament for the prevention and/or treatment

CC of a respiratory or lung disease. The respiratory or lung disease is
 CC chosen from airway inflammation, allergy(ies), asthma, impeded
 CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
 CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
 CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
 CC obstruction. The present sequence represents an oligonucleotide of the
 CC invention.

CC Sequence 20 BP; 0 A; 10 C; 0 G; 10 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 17.4; DB 1; Length 20;
 Best Local Similarity 94.7%; Pred. No. 4.6e+02;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 1180 AGAGAAAGAGAGAGAGA 1198
 19 AGAGAGAGAGAGAGAGA 1

RESULT 335
 ADK61702/C
 ID ADK61702 standard; DNA; 20 BP.
 AC ADK61702;
 XX
 XX 06-MAY-2004 (first entry)
 DT
 XX
 XX Base containing SSR sequence #6.
 DE
 XX
 XX rice variety; amplification genetic marker; ds.
 XX
 XX Oryza sp.
 OS
 XX
 XX JP2003319782-A.
 PN
 XX
 XX 11-NOV-2003.
 PD
 XX
 XX 02-MAY-2002; 2002JP-00130645.
 PF
 XX
 XX 02-MAY-2002; 2002JP-00130645.
 PR
 XX
 XX (HOKU-) HOKUREN NOGYO KYODO KUMITAI.
 PA
 XX
 XX (HOKK-) HOKKAIDO GREEN BIO KENKYUSHO KK.
 XX
 XX WPI; 2004-003560/01.
 DR
 XX
 XX Identifying rice variety using base sequence containing SSR sequence and
 PT amplifying genetic marker.
 PT
 XX
 XX Claim 22; SEQ ID NO 6; 30bp; Japanese.
 PS
 XX
 XX The present invention relates to identifying a rice variety as
 CC amplification genetic marker and identifying whether test rice variety is
 CC any one of the 32 rice varieties e.g., Kasalath, breath which came or
 CC Hayamasari, Italic Livorno, Dungan Shail, Arroz Da Terra, Fany, USSR22,
 CC Nihonbare. The method is useful for identifying rice variety and
 CC identifies excellent rice variety. The present sequence represents a base
 CC - containing SSR sequence of the invention.

CC Sequence 20 BP; 0 A; 10 C; 0 G; 10 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 17.4; DB 1; Length 20;
 Best Local Similarity 94.7%; Pred. No. 4.6e+02;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 1180 AGAGAAAGAGAGAGAGA 1198
 19 AGAGAGAGAGAGAGAGA 1

RESULT 336
 ADO46712/C
 ID ADO46712 standard; DNA; 20 BP.

XX ADO46712;
AC
XX
DT 15-JUL-2004 (first entry)
XX
DE Human oligonucleotide #2078.
XX
XX Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
XX CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
XX tryptase b; PDB4 A; PDB4 B; PDB4 C; PDB4 D; respiratory disease;
XX lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
XX asthma; lung allergy; inflammation; inflammatory disease; cystic fibrosis; CF;
XX airway inflammation; allergy; impeded respiration;
XX chronic obstructive pulmonary disease; COPD; allergic rhinitis;
XX acute respiratory distress syndrome; pulmonary hypertension;
XX lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX
XX Homo sapiens.
XX
XX US2004049022-A1.
XX
XX 11-MAR-2004.
XX
XX 25-JUL-2003; 2003US-00627930.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX (NYCE/) NYCE J W.
XX (SAND/) SANDRASAGRA A.
XX (TANG/) TANG L.
XX (AGUI/) AGUILAR D.
XX (MILL/) MILLER S.
XX (SHAH/) SHAHABUDDIN S.
XX (LUHH/) LU H.
XX (CONG/) CONG H.
XX
XX Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
XX Shahabuddin S, Lu H, Cong H;
XX
XX WPI; 2004-293804/27.
XX
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
XX initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
XX RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
XX asthma.
XX
XX Claim 2; SEQ ID NO 2178; 174bp; English.
XX
XX The invention relates to oligonucleotides anti-sense to an initiation
XX codon, coding region, 5' or 3' intron-exon junction, intron or region
XX with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
XX chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
XX -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
XX tryptase a, tryptase b, PDB4 A, PDB4 B, PDB4 C or PDB4 D. The invention
XX also relates to a method of screening a candidate compound that binds to
XX one or more nucleic acid target(s) or expressed product(s), for the
XX prevention and/or treatment of a respiratory or lung disease. The
XX oligonucleotides are useful for reducing or inhibiting expression of a
XX gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
XX CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
XX tryptase b, PDB4 A, PDB4 B, PDB4 C, or PDB4 D. The oligonucleotides are
XX useful for preventing or treating a respiratory or lung disease. The
XX respiratory or lung disease is associated with hyper-responsiveness to
XX and/or increased levels of, adenosine and/or levels of adenosine A
XX receptor(s), and/or asthma and/or lung allergies associated with
XX inflammation or an inflammatory disease. The respiratory or lung disease
XX is chosen from airway inflammation, allergy, asthma, impeded respiration,
XX cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
XX allergic rhinitis, acute respiratory distress syndrome, pulmonary
XX hypertension, lung inflammation, bronchitis, airway obstruction or
XX bronchoconstriction. This sequence represents an oligonucleotide of the
XX invention.

XX SQ Sequence 20 BP; 2 A; 8 C; 0 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 17.4; DB 1; Length 20;
XX Best Local Similarity 94.7%; Pred. No. 4.6e+02;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1183 GAAGAGAGAGAGAGAAAT 1201
XX
XX Db 20 GAGAGAGAGAGAGAGAAAT 2
XX
XX RESULT 337
XX ADO46716/c
XX ID ADO46716 standard; DNA; 20 BP.
XX
XX ADO46716;
XX
XX 15-JUL-2004 (first entry)
XX
XX Human oligonucleotide #2082.
XX
XX Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
XX CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
XX tryptase b; PDB4 A; PDB4 B; PDB4 C; PDB4 D; respiratory disease;
XX lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
XX asthma; lung allergy; inflammation; inflammatory disease; cystic fibrosis; CF;
XX airway inflammation; allergy; impeded respiration;
XX chronic obstructive pulmonary disease; COPD; allergic rhinitis;
XX acute respiratory distress syndrome; pulmonary hypertension;
XX lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX
XX Homo sapiens.
XX
XX US2004049022-A1.
XX
XX 11-MAR-2004.
XX
XX 25-JUL-2003; 2003US-00627930.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX (NYCE/) NYCE J W.
XX (SAND/) SANDRASAGRA A.
XX (TANG/) TANG L.
XX (AGUI/) AGUILAR D.
XX (MILL/) MILLER S.
XX (SHAH/) SHAHABUDDIN S.
XX (LUHH/) LU H.
XX (CONG/) CONG H.
XX
XX Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
XX Shahabuddin S, Lu H, Cong H;
XX
XX WPI; 2004-293804/27.
XX
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
XX initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
XX RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
XX asthma.
XX
XX Claim 2; SEQ ID NO 2182; 174bp; English.
XX
XX The invention relates to oligonucleotides anti-sense to an initiation
XX codon, coding region, 5' or 3' intron-exon junction, intron or region
XX with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
XX chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
XX -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
XX tryptase a, tryptase b, PDB4 A, PDB4 B, PDB4 C or PDB4 D. The invention
XX also relates to a method of screening a candidate compound that binds to
XX one or more nucleic acid target(s) or expressed product(s), for the
XX prevention and/or treatment of a respiratory or lung disease. The

CC oligonucleotides are useful for reducing or inhibiting expression of a
 CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
 CC CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICM, VCM, tryptase a,
 CC tryptase b, PDB4 A, PDB4 B, PDB4 C, or PDB4 D. The oligonucleotides are
 CC useful for preventing or treating a respiratory or lung disease. The
 CC respiratory or lung disease is associated with hyper-responsiveness to
 CC and/or increased levels of, adenosine and/or levels of adenosine A
 CC receptor(s), and/or asthma and/or lung allergies associated with
 CC inflammation or an inflammatory disease. The respiratory or lung disease
 CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
 CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
 CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
 CC hypertension, lung inflammation, bronchitis, airway obstruction or
 CC bronchoconstriction. This sequence represents an oligonucleotide of the
 CC invention.

XX Sequence 20 BP; 0 A; 10 C; 0 G; 10 T; 0 U; 0 Other;
 SQ

Query Match 0.3%; Score 17.4; DB 1; Length 20;
 Best Local Similarity 94.7%; Pred. No. 4.6e+02;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1180 AGAGAAAGAGAGAGAGA 1198
 Db 19 AGAGAGAGAGAGAGAGA 1

RESULT 338
 ADO46715/c
 ID ADO46715 standard; DNA; 20 BP.
 AC ADO46715;
 XX
 XX 15-JUL-2004 (first entry)
 DT
 XX
 XX Human oligonucleotide #2081.
 DE
 XX
 XX Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
 KM CCR1, CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICM; VCM; tryptase a;
 KM tryptase b; PDB4 A; PDB4 B; PDB4 C; PDB4 D; respiratory disease;
 KM lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
 KM asthma; lung allergy; inflammation; inflammatory disease;
 KM airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
 KM chronic obstructive pulmonary disease; COPD; allergic rhinitis;
 KM acute respiratory distress syndrome; pulmonary hypertension;
 KM lung inflammation; bronchitis; airway obstruction; bronchoconstriction.

XX Homo sapiens.
 OS
 XX
 XX US2004049022-A1.
 PN
 XX
 XX 11-MAR-2004.
 PD
 XX
 XX 25-JUL-2003; 2003US-00627930.
 PF
 XX
 XX 23-APR-2002; 2002WO-US013135.
 PR 23-APR-2002; 2002WO-US013143.
 XX
 XX (NYCE/) NYCE J W.
 PA (SAND/) SANRASAGRA A.
 PA (TANG/) TANG L.
 PA (AGUI/) AGUI L.
 PA (MILL/) MILLER S.
 PA (SHAH/) SHAHABUDDIN S.
 PA (LUHR/) LU H.
 PA (CONG/) CONG H.
 XX
 XX NYCE JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
 PI Shahabuddin S, Lu H, Cong H;
 XX WPI; 2004-293804/27.
 XX Novel single or multiple target oligonucleotide anti-sense to e.g.

PT initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
 PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
 PT asthma.
 XX
 XX Claim 2; SEQ ID NO 2181; 17pp; English.
 PS

XX The invention relates to oligonucleotides anti-sense to an initiation
 CC codon, coding region, 5' or 3' intron-exon junction, intron or region
 CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
 CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)-
 CC 5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICM, VCM,
 CC tryptase a, tryptase b, PDB4 A, PDB4 B, PDB4 C or PDB4 D. The invention
 CC also relates to a method of screening a candidate compound that binds to
 CC one or more nucleic acid target(s) or expressed product(s), for the
 CC prevention and/or treatment of a respiratory or lung disease. The
 CC oligonucleotides are useful for reducing or inhibiting expression of a
 CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
 CC CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICM, VCM, tryptase a,
 CC tryptase b, PDB4 A, PDB4 B, PDB4 C, or PDB4 D. The oligonucleotides are
 CC useful for preventing or treating a respiratory or lung disease. The
 CC respiratory or lung disease is associated with hyper-responsiveness to
 CC and/or increased levels of, adenosine and/or levels of adenosine A
 CC receptor(s), and/or asthma and/or lung allergies associated with
 CC inflammation or an inflammatory disease. The respiratory or lung disease
 CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
 CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
 CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
 CC hypertension, lung inflammation, bronchitis, airway obstruction or
 CC bronchoconstriction. This sequence represents an oligonucleotide of the
 CC invention.

XX Sequence 20 BP; 0 A; 10 C; 0 G; 10 T; 0 U; 0 Other;
 SQ

Query Match 0.3%; Score 17.4; DB 1; Length 20;
 Best Local Similarity 94.7%; Pred. No. 4.6e+02;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1180 AGAGAAAGAGAGAGAGA 1198
 Db 19 AGAGAGAGAGAGAGAGA 1

RESULT 339
 ADO46713/c
 ID ADO46713 standard; DNA; 20 BP.
 AC ADO46713;
 XX
 XX 15-JUL-2004 (first entry)
 DT
 XX
 XX Human oligonucleotide #2079.
 DE
 XX
 XX Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
 KM CCR1, CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICM; VCM; tryptase a;
 KM tryptase b; PDB4 A; PDB4 B; PDB4 C; PDB4 D; respiratory disease;
 KM lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
 KM asthma; lung allergy; inflammation; inflammatory disease; cystic fibrosis; CF;
 KM airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
 KM chronic obstructive pulmonary disease; COPD; allergic rhinitis;
 KM acute respiratory distress syndrome; pulmonary hypertension;
 KM lung inflammation; bronchitis; airway obstruction; bronchoconstriction.

XX Homo sapiens.
 OS
 XX
 XX US2004049022-A1.
 PN
 XX
 XX 11-MAR-2004.
 PD
 XX
 XX 25-JUL-2003; 2003US-00627930.
 PF
 XX
 XX 23-APR-2002; 2002WO-US013135.
 PR 23-APR-2002; 2002WO-US013143.
 XX


```

ADM16170/c
ID ADM16170 standard; DNA; 20 BP.
AC ADM16170;
XX
XX 15-JUL-2004 (first entry)
XX
XX Murine SAC1 DNA PCR primer #397.
XX
XX Mouse; SAC1; PCR; ss; carbohydrate; sweetener; ethanol; obesity;
XX diabetes; alcoholism; antidiabetic; alcohol; anorectic; antialcoholic;
XX primer.
XX
XX Mus musculus.
XX
XX US2004081964-A1.
XX
XX 29-APR-2004.
XX
XX 25-OCT-2002; 2002US-00280183.
XX
XX 25-OCT-2002; 2002US-00280183.
XX
XX (BACH/) BACHMANOV A A.
XX (BEAU/) BEAUCHAMP G K.
XX (LISX/) LI S.
XX (LIXX/) LI X.
XX (REED/) REED D R.
XX (TORD/) TORDOFF M G.
XX (ROSS/) ROSS D A.
XX (OHMA/) OHMAN J D.
XX (CHAT/) CHATTERJEE A.
XX (DJON/) DE JONG P J.
XX
XX Bachmanov AA, Beauchamp GK, Li S, Li X, Reed DR, Tordoff MG;
XX Ross DA, Ohman JD, Chatterjee A, De Jong PJ;
XX
XX MPI; 2004-340133/31.
XX
XX New isolated polynucleotides for sensing carbohydrates, other sweeteners,
XX or ethanol, useful for screening drugs for inhibition or restoration of
XX gene function as antidiabetic, antioesity or antialcohol consumption
XX therapies.
XX
XX Example 12; SEQ ID NO 440; 148bp; English.
XX
XX The invention relates to SAC1 polypeptides and the polynucleotides
XX encoding them. The polynucleotides contain a variation associated with
XX sensing carbohydrates, other sweeteners or ethanol. The invention also
XX relates to a method for analysing a biomolecule in a biological sample,
XX comprising altering SAC1 activity in the sample and measuring the
XX activity, a method for analysing a polynucleotide in a biological sample,
XX comprising contacting a polynucleotide in a biological sample with a
XX probe where the probe hybridises to a SAC1 polynucleotide to form a
XX hybridisation complex and detecting the hybridisation complex, a method
XX of identifying susceptibility to obesity or diabetes comprising comparing
XX the nucleotide sequence of the suspected SAC1 allele with a wild type
XX nucleotide sequence, where the difference between the suspected allele
XX and the wild-type sequence identifies a sequence variation of the SAC1
XX nucleotide sequence, and a method of treating or preventing obesity,
XX diabetes or alcoholism associated with expression of SAC1, comprising
XX administering to a subject a pharmaceutical composition and a transgenic
XX animal that carries an altered SAC1 allele. The methods and compositions
XX of the invention are useful for screening drugs for inhibition or
XX restoration of gene function as antidiabetic, antioesity or antialcohol
XX consumption therapies and for identifying sweeteners and alcohols. This
XX sequence represents a PCR primer used to amplify murine SAC1 DNA of the
XX invention.
XX
XX Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 17.4; DB 1; Length 20;
XX Best Local Similarity 94.7%; Pred. No. 4.6e+02;

```

```

Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 3124 ACCGAGCTGACCTGAGCT 3142
Db 19 ACCGAGCTGACCTGAGCT 1
RESULT 342
ADM16192/c
ID ADM16192 standard; DNA; 20 BP.
AC ADM16192;
XX
XX 15-JUL-2004 (first entry)
XX
XX Murine SAC1 DNA PCR primer #419.
XX
XX Mouse; SAC1; PCR; ss; carbohydrate; sweetener; ethanol; obesity;
XX diabetes; alcoholism; antidiabetic; alcohol; anorectic; antialcoholic;
XX primer.
XX
XX Mus musculus.
XX
XX US2004081964-A1.
XX
XX 29-APR-2004.
XX
XX 25-OCT-2002; 2002US-00280183.
XX
XX 25-OCT-2002; 2002US-00280183.
XX
XX (BACH/) BACHMANOV A A.
XX (BEAU/) BEAUCHAMP G K.
XX (LISX/) LI S.
XX (LIXX/) LI X.
XX (REED/) REED D R.
XX (TORD/) TORDOFF M G.
XX (ROSS/) ROSS D A.
XX (OHMA/) OHMAN J D.
XX (CHAT/) CHATTERJEE A.
XX (DJON/) DE JONG P J.
XX
XX Bachmanov AA, Beauchamp GK, Li S, Li X, Reed DR, Tordoff MG;
XX Ross DA, Ohman JD, Chatterjee A, De Jong PJ;
XX
XX MPI; 2004-340133/31.
XX
XX New isolated polynucleotides for sensing carbohydrates, other sweeteners,
XX or ethanol, useful for screening drugs for inhibition or restoration of
XX gene function as antidiabetic, antioesity or antialcohol consumption
XX therapies.
XX
XX Example 12; SEQ ID NO 462; 148bp; English.
XX
XX The invention relates to SAC1 polypeptides and the polynucleotides
XX encoding them. The polynucleotides contain a variation associated with
XX sensing carbohydrates, other sweeteners or ethanol. The invention also
XX relates to a method for analysing a biomolecule in a biological sample,
XX comprising altering SAC1 activity in the sample and measuring the
XX activity, a method for analysing a polynucleotide in a biological sample,
XX comprising contacting a polynucleotide in a biological sample with a
XX probe where the probe hybridises to a SAC1 polynucleotide to form a
XX hybridisation complex and detecting the hybridisation complex, a method
XX of identifying susceptibility to obesity or diabetes comprising comparing
XX the nucleotide sequence of the suspected SAC1 allele with a wild type
XX nucleotide sequence, where the difference between the suspected allele
XX and the wild-type sequence identifies a sequence variation of the SAC1
XX nucleotide sequence, and a method of treating or preventing obesity,
XX diabetes or alcoholism associated with expression of SAC1, comprising
XX administering to a subject a pharmaceutical composition and a transgenic
XX animal that carries an altered SAC1 allele. The methods and compositions
XX of the invention are useful for screening drugs for inhibition or
XX restoration of gene function as antidiabetic, antioesity or antialcohol

```

CC consumption therapies and for identifying sweeteners and alcohols. This
CC sequence represents a PCR primer used to amplify murine SACL DNA of the
CC invention.
SQ Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 4.6e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3124 ACCGAGCTGAGCTGAGCT 3142
DB 19 ACCAGCTGAGCTGAGCT 1
RESULT 343
AAQ20033/C
ID AAQ20033 standard; DNA; 21 BP.
XX
XX AAQ20033;
XX
XX 01-APR-1992 (first entry)
XX
XX Cross-linking oligomer 214 for targeting human TNF.
XX
XX deoxyribonucleic acid; major groove; ethanoamino group;
KW aziridinylcytosine; cross-linking group; tumour necrosis factor; ss.
XX
XX Synthetic.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1
FT /*tag= a
FT /mod_base= OTHER
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT modified_base 2
FT /*tag= b
FT /mod_base= OTHER
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT modified_base 3
FT /*tag= c
FT /mod_base= OTHER
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT modified_base 4
FT /*tag= d
FT /mod_base= OTHER
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT modified_base 7
FT /*tag= e
FT /mod_base= m5c
FT modified_base 9
FT /*tag= f
FT /mod_base= m5c
FT modified_base 11
FT /*tag= g
FT /mod_base= m5c
FT modified_base 13
FT /*tag= h
FT /mod_base= m5c
FT modified_base 15
FT /*tag= i
FT /mod_base= m5c
FT modified_base 17
FT /*tag= j
FT /mod_base= m5c
FT modified_base 21
FT /*tag= k
FT /mod_base= OTHER
FT /note= "N4N4-ethanocytosine"
XX
XX MO9118997-A.
XX
XX 12-DEC-1991.

XX
XX 25-MAY-1990; 90US-00529346.
XX
XX 25-MAY-1990; 90US-00529346.
XX
XX 14-JUN-1991; 91US-00640654.
XX
XX (GILE-) GILEAD SCIE INC.
XX
XX Matteucci MD, Krawczyk S;
XX
XX WPI; 1992-007480/01.
XX
XX
XX New sequence-specific non-photo-activated crosslinking agents - bind to
PT the major groove of duplex DNA and are esp. useful for treating latent
XX infections e.g. HIV.
XX
XX Example 4; Page 25; 42pp; English.
XX
XX The sequence is designed to target the human tumour necrosis factor
CC beginning at nucleotide 1137 and to covalently cross-link to it via the
CC N4N4-ethanocytosine group. See also AAQ20031-Q20038
XX
SQ Sequence 21 BP; 4 A; 7 C; 0 G; 10 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 4.6e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1183 GAAAGAGAGAGAGAAAT 1201
DB 21 GAAAGAGAGAGAGAAAT 3
RESULT 344
AAQ20034/C
ID AAQ20034 standard; DNA; 21 BP.
XX
XX AAQ20034;
XX
XX 01-APR-1992 (first entry)
XX
XX Cross-linking oligomer 215 for targeting human TNF.
XX
XX deoxyribonucleic acid; major groove; ethanoamino group;
KW aziridinylcytosine; cross-linking group; tumour necrosis factor; ss.
XX
XX Synthetic.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1
FT /*tag= a
FT /mod_base= OTHER
FT /note= "N4N4-ethanocytosine"
FT modified_base 2
FT /*tag= b
FT /mod_base= OTHER
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT modified_base 3
FT /*tag= c
FT /mod_base= OTHER
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT modified_base 4
FT /*tag= d
FT /mod_base= OTHER
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT modified_base 7
FT /*tag= e
FT /mod_base= m5c
FT modified_base 9
FT /*tag= f
FT /mod_base= m5c
FT modified_base 11
FT /*tag= g


```
FT      /mod_base= m5c
FT      13
FT      /tag= h
FT      /mod_base= m5c
FT      15
FT      /tag= i
FT      /mod_base= m5c
FT      17
FT      /tag= j
FT      /mod_base= m5c
FT      21
FT      /tag= k
FT      /mod_base= OTHER
FT      /note= "N4N4-ethanocytosine"
XX      WO9118997-A.
XX      12-DEC-1991.
XX      25-MAY-1990; 90US-00529346.
XX      25-MAY-1990; 90US-00529346.
XX      14-JAN-1991; 91US-00640654.
XX      (GILB-) GILRAD SCI INC.
XX      Matteucci MD, Krawczyk S;
XX      WPI; 1992-007480/01.
XX      New sequence-specific non-photo-activated crosslinking agents - bind to
XX      the major groove of duplex DNA and are esp. useful for treating latent
XX      infections e.g. HIV.
XX      Example 4; Page 25; 42pp; English.
XX      The sequence is designed to target the Human tumour necrosis factor
XX      CC beginning at nucleotide 1137 and to covalently cross-link to it via the
XX      CC N4N4-ethanocytosine groups. See also AAQ20031-Q20038
XX      SQ
XX      Sequence 21 BP; 3 A; 8 C; 0 G; 10 T; 0 U; 0 Other;
XX      Query Match 0.34; Score 17.4; DB 1; Length 21;
XX      Best Local Similarity 94.7%; Pred. No. 4.6e+02;
XX      Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX      QY 1183 GAAAGAGAGAGAGAAAT 1201
XX      Db 21 GAAAGAGAGAGAGAAAT 3
XX      RESULT 345
XX      AAQ30384/c
XX      ID AAQ30384 standard; DNA; 21 BP.
XX      AC AAQ30384;
XX      DT 25-MAR-2003 (revised)
XX      DT 07-DEC-1992 (first entry)
XX      DE Oligomer TNR215 for forming triplex with HUMTNRFAA target duplex.
XX      KW Tumour necrosis factor; herpes simplex; AIDS; modified; HIV; RSV; HPV;
XX      KW malignancy; hepatitis; inflammation; ss.
XX      OS Synthetic.
XX      FH Key Location/Qualifiers
XX      FT modified_base 1
XX      FT /tag= a
XX      FT /mod_base= OTHER
XX      FT /note= "OTHER= N4 N4 ethanocytosine"
XX      FT modified_base 2
```

```
FT      /tag= b
FT      /mod_base= OTHER
FT      /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT      3
FT      /tag= c
FT      /mod_base= OTHER
FT      /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT      4
FT      /tag= d
FT      /mod_base= OTHER
FT      /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT      7
FT      /tag= e
FT      /mod_base= m5c
FT      9
FT      /tag= f
FT      /mod_base= m5c
FT      11
FT      /tag= g
FT      /mod_base= m5c
FT      13
FT      /tag= h
FT      /mod_base= m5c
FT      15
FT      /tag= g
FT      /mod_base= m5c
FT      17
FT      /tag= h
FT      /mod_base= m5c
FT      21
FT      /tag= i
FT      /mod_base= OTHER
FT      /note= "OTHER= N4 N4 ethanocytosine"
XX      WO9209705-A1.
XX      11-JUN-1992.
XX      25-NOV-1991; 91WO-US008811.
XX      23-NOV-1990; 90US-00617907.
XX      18-JAN-1991; 91US-00643382.
XX      08-APR-1991; 91US-00683420.
XX      17-APR-1991; 91US-00686544.
XX      17-APR-1991; 91US-00686546.
XX      17-APR-1991; 91US-00686547.
XX      27-SEP-1991; 91US-00766733.
XX      (GILB-) GILRAD SCI INC.
XX      Froehner B, Krawczyk S, Matteucci MD, Milligan J;
XX      WPI; 1992-217083/26.
XX      New oligomers contg. modified bases - which form a triplex with G-C
XX      PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
XX      PT herpes malignancy and inflammation.
XX      PS Claim 12; Page 70; 77pp; English.
XX      The synthetic oligomer is capable of forming a triplex at physiological
XX      CC pH with a purine rich target sequence by coupling into the major groove
XX      CC of the duplex. The specific target sequence of this oligomer is the human
XX      CC tumour necrosis factor beginning at nucleotide 1137 contg. a purine rich
XX      CC sequence concd. on one strand of the duplex. The oligomer, and others
XX      CC like it are useful in diagnosis and therapy of diseases characterised by
XX      CC specific DNA duplex targets, e.g. HPV; HBV; HIV; hepatitis B, herpes,
XX      CC malignant tumours and inflammation. The triple helices form under mild
XX      CC conditions thus assays may be carried out without subjecting the test
XX      CC specimen to harsh conditions. See also AAQ25452-25501 and AAQ30226-448.
XX      CC (Updated on 25-MAR-2003 to correct PN field.)
XX      SQ
XX      Sequence 21 BP; 3 A; 8 C; 0 G; 10 T; 0 U; 0 Other;
```

```
Query Match      0.3%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 4.6e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1183 GAAAGAGAGAGAGAAAT 1201
DB      21 GAAAGAGAGAGAGAAAT 3

RESULT 346
AAQ30383/c
ID      AAQ30383 standard; DNA; 21 BP.
XX
XX      AAQ30383;
AC
XX
XX      25-MAR-2003 (revised)
DT      07-DEC-1992 (first entry)
XX
XX      Oligomer TNF214 for forming triplex with HUMTNFA target duplex.
DE
XX      Tumour necrosis factor; herpes simplex; AIDS; modified; HIV; RSV; HPV;
KM      malignancy; hepatitis; inflammation; ss.
XX
XX      Synthetic.
OS
XX
XX      Key
FH      Location/Qualifiers
FT      1
FT      /tag= a
FT      /mod_base= OTHER
FT      /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT      2
FT      /tag= b
FT      /mod_base= OTHER
FT      /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT      3
FT      /tag= c
FT      /mod_base= OTHER
FT      /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT      4
FT      /tag= d
FT      /mod_base= OTHER
FT      /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT      7
FT      /tag= e
FT      /mod_base= m5c
FT      9
FT      /tag= f
FT      /mod_base= m5c
FT      11
FT      /tag= g
FT      /mod_base= m5c
FT      13
FT      /tag= h
FT      /mod_base= m5c
FT      15
FT      /tag= i
FT      /mod_base= m5c
FT      17
FT      /tag= j
FT      /mod_base= m5c
FT      21
FT      /tag= k
FT      /mod_base= OTHER
FT      /note= "OTHER= N4 N4 ethanocytosine"
XX
XX      WO9209705-A1.
XX
XX      11-JUN-1992.
XX
XX      25-NOV-1991; 91WO-US008811.
XX
XX      23-NOV-1990; 90US-00617907.
```

```
PR      18-JAN-1991; 91US-00643382.
PR      08-APR-1991; 91US-00653420.
PR      17-APR-1991; 91US-00686544.
PR      17-APR-1991; 91US-00686546.
PR      17-APR-1991; 91US-00686547.
PR      27-SEP-1991; 91US-00766733.
XX
XX      (GILE-) GILEAD SCT INC.
XX
XX      Froehler B, Krawczyk S, Matteucci MD, Milligan J;
XX
XX      WPI; 1992-217083/26.
XX
XX      New oligomers contg. modified bases - which form a triplex with G-C
XX      doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
XX      herpes malignancy and inflammation.
XX
XX      Claim 12; Page 70; 77pp; English.
XX
XX      The synthetic oligomer is capable of forming a triplex at physiological
XX      pH with a purine rich target sequence by coupling into the major groove
XX      of the duplex. The specific target sequence of this oligomer is the human
XX      tumour necrosis factor beginning at nucleotide 1137 contg. a purine rich
XX      sequence concd. on one strand of the duplex. The oligomer, and others
XX      like it are useful in diagnosis and therapy of diseases characterised by
XX      specific DNA duplex targets, e.g. HPV; HER; HIV; hepatitis B, herpes,
XX      malignant tumours and inflammation. The triple helices form under mild
XX      conditions thus assays may be carried out without subjecting the test
XX      specimen to harsh conditions. See also AAQ25452-25501 and AAQ30226-448.
XX      (Updated on 25-MAR-2003 to correct PN field.)
XX
XX      Sequence 21 BP; 4 A; 7 C; 0 G; 10 T; 0 U; 0 Other;
SQ

Query Match      0.3%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 4.6e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      1183 GAAAGAGAGAGAGAAAT 1201
DB      21 GAAAGAGAGAGAGAAAT 3

RESULT 347
AAT86583/c
ID      AAT86583 standard; DNA; 21 BP.
XX
XX      AAT86583;
AC
XX
XX      25-MAR-1998 (first entry)
DT
XX
XX      Phosphorothioate oligonucleotide #2.
DE
XX
XX      Phosphorothioate oligonucleotide; dimeric phosphoramidite synthon;
KM      thioester; DNA synthesis; antisense oligonucleotide; gene therapy; ss.
XX
XX      Synthetic.
OS
XX
XX      Key
FH      Location/Qualifiers
FT      misc_difference 1..21
FT      /tag= a
FT      /note= "Phosphorothioate linkages between alternate
FT      nucleotides (1 and 2, 3 and 4 etc.)"
XX
XX      WO9729116-A1.
XX
XX      14-AUG-1997.
XX
XX      06-FEB-1997; 97WO-GB000327.
XX
XX      06-FEB-1996; 96GB-00002326.
XX
XX      (CRUA-) CRUACHEM LTD.
XX
```

PI Reese CB, Rao MV;
 XX
 DR WPI, 1997-415290/38.
 XX
 PT Solid phase synthesis of phosphorothioate oligonucleotide(s) using new
 PT dimeric synthon(s) - useful as antisense molecules for inhibiting gene
 XX expression.
 XX
 PS Example 3, Page 25; 38pp; English.
 XX
 CC The present sequence represents a phosphorothioate oligonucleotide which
 CC was prepared by solid phase synthesis. The method comprises adding at
 CC least one dimeric phosphoramidite synthon, optionally having a protected
 CC thioester group in its internucleotide link, during the synthesis cycle.
 CC These novel dimeric phosphoramidite synthons are used as antisense
 CC molecules for inhibition of gene expression. The method gives increased
 CC yields of the phosphorothioate oligonucleotide (since fewer cycles are
 CC needed) and facilitates separation of impurities (greater difference in
 CC size compared with use of monomeric synthons)
 XX
 SQ Sequence 21 BP; 1 A; 10 C; 0 G; 10 T; 0 U; 0 Other;
 Query Match 0.3%; Score 17.4; DB 1; Length 21;
 Best Local Similarity 94.7%; Pred. No. 4.6e+02;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1180 AGAGAAAGAGAGAGAGAGA 1198
 Db 20 AGAGAGAGAGAGAGAGAGA 2
 XX
 RESULT 348
 AAA46230
 ID AAA46230 standard; DNA; 21 BP.
 XX
 AC AAA46230;
 XX
 DT 04-SRP-2000 (first entry)
 XX
 DE Primer IPM8R for interphotoreceptor matrix proteoglycan IPM150 cDNA.
 XX
 XX Interphotoreceptor matrix; IPM; proteoglycan; IPM150; IPMC; IPM200;
 KM chromosome 6q13-q15; ocular disease; retinal detachment;
 KM choriorretinal degeneration; retinal degeneration; cone degeneration;
 KM age related macular degeneration; photoreceptor degeneration;
 KM retinal pigment epithelium degeneration; mucopolysaccharidosis;
 KM rod-cone dystrophy; cone-rod dystrophy; PCR primer; ss.
 XX
 OS Unidentified.
 XX
 PN WO200026367-A2.
 XX
 PD 11-MAY-2000.
 XX
 PF 29-OCT-1999; 99WO-US025440.
 XX
 PR 29-OCT-1998; 98US-00183972.
 XX
 PA (IOWA) UNIV IOWA RES FOUND.
 XX
 PI Hageman GS, Kuehn MH;
 XX
 DR WPI, 2000-365616/31.
 XX
 XX
 PT Nucleic acids encoding interphotoreceptor matrix proteoglycans useful for
 PT preventing, diagnosing and treating ocular disorders such as retinal
 PT detachment and choriorretinal degeneration.
 XX
 PS Claim 43, Page 44; 183pp; English.
 XX
 CC PCR primers AAA46209-42 were used to amplify cDNA encoding an
 CC interphotoreceptor matrix (IPM) proteoglycan, designated IPM150. The
 CC protein is an IPM component (IPMC). Two subfamilies of IPMCs, IPM150 and

CC IPM200, exist. The human IPM150 gene is located on chromosome 6q13-q15,
 CC between markers CHC.GATA11P10 and D6S284. The IPM proteins may be used
 CC to supplement a patient's own production of the protein or to rectify
 CC alterations in their nucleic acids that result in expression of an
 CC inactive protein. The IPM nucleic acids may be used in this way to treat
 CC ocular diseases such as retinal detachment, choriorretinal degeneration,
 CC retinal degeneration, age related macular degeneration, photoreceptor
 CC degeneration, RPE (retinal pigment epithelium) degeneration, cone
 CC degeneration, mucopolysaccharidosis, rod-cone dystrophy and cone-rod
 CC dystrophy. The nucleic acids and proteins may also be used to assay for
 CC other modulators of IPM proteoglycan expression and activity that may be
 CC used to treat ocular diseases. The nucleic acids and proteins may also be
 CC used as diagnostic reagents to detect the presence of IPM nucleic acids
 CC and their products in samples from patients according to standard
 CC methodologies
 XX
 SQ Sequence 21 BP; 7 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 0.3%; Score 17.4; DB 1; Length 21;
 Best Local Similarity 94.7%; Pred. No. 4.6e+02;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1349 AAAAATTCACACAGCTGCT 1367
 Db 1 AACAAATTCACACAGCTGCT 19
 XX
 RESULT 349
 ADJ13110/c
 ID ADJ13110 standard; DNA; 21 BP.
 XX
 AC ADJ13110;
 XX
 DT 20-MAY-2004 (first entry)
 XX
 DE Human DNA probe used to immobilise Cpg methylated DNA seqID 237.
 XX
 XX probe; ss; chemical modification; methylation; array; Cpg island;
 KM tumour suppressor; p16; human; H69; H1618.
 XX
 OS Homo sapiens.
 XX
 PN US2003152950-A1.
 XX
 PD 14-AUG-2003.
 XX
 PF 27-JUN-2002; 2002US-00184085.
 XX
 PR 27-JUN-2001; 2001US-0301370P.
 XX
 PA (GARIN/) GARNER H R.
 PA (MINN/) MINNA J D.
 PA (LUEB/) LUEBKE K J.
 PA (BALO/) BALOG R P.
 XX
 PI Garner HR, Minna JD, Luebke KJ, Balog RP;
 XX
 DR WPI, 2003-874843/81.
 XX
 XX
 PT Analysis of chemical modification of DNA involves obtaining sample of DNA
 PT to be analyzed, treating DNA with chemical reagents that result in
 PT different base sequences, and determining sequence of resulting DNA.
 XX
 PS Example 1; SEQ ID NO 237; 210pp; English.
 XX
 CC This invention relates to a novel method for analyzing chemically
 CC modified macromolecules. Specifically, it refers to a high throughput
 CC method for the parallel analysis of many potential sites of chemical
 CC modification (e.g. methylation) in DNA. The present invention describes
 CC treating the DNA with one or more chemical reagents that result in
 CC different base sequences depending upon the presence or absence of the
 CC modification of interest. Accordingly, a device comprising an array of
 CC probes is provided to hybridise with and select the altered DNA sequences

CC that comprise the modifications of interest such as a CpG island. In
CC particular, this invention refers to analysing the methylation pattern of
CC a region of the promoter for the tumour suppressor gene p16 from two
CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
CC is a human DNA probe used to immobilise CpG methylated DNA of the
CC invention.

XX Sequence 21 BP, 3 A, 12 C, 0 G, 6 T, 0 U, 0 Other;

Query Match 0.3%; Score 17.4; DB 1; Length 21;

Best Local Similarity 94.7%; Pred. No. 4.6e+02; Mismatches 1; Indels 0; Gaps 0;

Qy 2436 GGATGAGAGGGGAGAGGT 2454
19 GGATGAGAGGGGAGAGGT 1

RESULT 350

ADJ13108/c ADJ13108 standard; DNA; 21 BP.

AC ADJ13108;

DT 20-MAY-2004 (first entry)

DE Human DNA probe used to immobilise CpG methylated DNA SeqID 235.

XX probe; ss; chemical modification; methylation; array; CpG island;

KW tumour suppressor; p16; human; H69; H1618.

XX Homo sapiens.

OS US2003152950-A1.

PN 14-AUG-2003.

PD 27-JUN-2002; 2002US-00184085.

PF 27-JUN-2001; 2001US-0301370P.

PR (GARN/) GARNER H R.

PA (MINN/) MINNA J D.

PA (LUEB/) LUEBKE K J.

PA (BALO/) BALOG R P.

PI Garner HR, Minna JD, Luebke KJ, Balog RP;

DR WPI; 2003-874843/81.

XX Analysis of chemical modification of DNA involves obtaining sample of DNA
XX to be analyzed, treating DNA with chemical reagents that result in
XX different base sequences, and determining sequence of resulting DNA.
XX Example 1; SEQ ID NO 235; 210pp; English.

XX This invention relates to a novel method for analysing chemically
XX modified macromolecules. Specifically, it refers to a high throughput
XX method for the parallel analysis of many potential sites of chemical
XX modification (e.g. methylation) in DNA. The present invention describes
XX treating the DNA with one or more chemical reagents that result in
XX different base sequences depending upon the presence or absence of the
XX modification of interest. Accordingly, a device comprising an array of
XX probes is provided to hybridise with and select the altered DNA sequences
XX that comprise the modifications of interest such as a CpG island. In
XX particular, this invention refers to analysing the methylation pattern of
XX a region of the promoter for the tumour suppressor gene p16 from two
XX human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
XX is a human DNA probe used to immobilise CpG methylated DNA of the
XX invention.

XX Sequence 21 BP, 3 A, 13 C, 0 G, 5 T, 0 U, 0 Other;

Query Match 0.3%; Score 17.4; DB 1; Length 21;

Best Local Similarity 94.7%; Pred. No. 4.6e+02; Mismatches 1; Indels 0; Gaps 0;

Qy 2436 GGATGAGAGGGGAGAGGT 2454
21 GGATGAGAGGGGAGAGGT 3

RESULT 351

ADJ13074/c ADJ13074 standard; DNA; 21 BP.

AC ADJ13074;

DT 20-MAY-2004 (first entry)

DE Human DNA probe used to immobilise CpG methylated DNA SeqID 201.

XX probe; ss; chemical modification; methylation; array; CpG island;

KW tumour suppressor; p16; human; H69; H1618.

XX Homo sapiens.

OS US2003152950-A1.

PN 14-AUG-2003.

PD 27-JUN-2002; 2002US-00184085.

PF 27-JUN-2001; 2001US-0301370P.

PR (GARN/) GARNER H R.

PA (MINN/) MINNA J D.

PA (LUEB/) LUEBKE K J.

PA (BALO/) BALOG R P.

PI Garner HR, Minna JD, Luebke KJ, Balog RP;

DR WPI; 2003-874843/81.

XX Analysis of chemical modification of DNA involves obtaining sample of DNA
XX to be analyzed, treating DNA with chemical reagents that result in
XX different base sequences, and determining sequence of resulting DNA.
XX Example 1; SEQ ID NO 201; 210pp; English.

XX This invention relates to a novel method for analysing chemically
XX modified macromolecules. Specifically, it refers to a high throughput
XX method for the parallel analysis of many potential sites of chemical
XX modification (e.g. methylation) in DNA. The present invention describes
XX treating the DNA with one or more chemical reagents that result in
XX different base sequences depending upon the presence or absence of the
XX modification of interest. Accordingly, a device comprising an array of
XX probes is provided to hybridise with and select the altered DNA sequences
XX that comprise the modifications of interest such as a CpG island. In
XX particular, this invention refers to analysing the methylation pattern of
XX a region of the promoter for the tumour suppressor gene p16 from two
XX human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
XX is a human DNA probe used to immobilise CpG methylated DNA of the
XX invention.

XX Sequence 21 BP, 3 A, 11 C, 1 G, 6 T, 0 U, 0 Other;

Query Match 0.3%; Score 17.4; DB 1; Length 21;

Best Local Similarity 94.7%; Pred. No. 4.6e+02; Mismatches 1; Indels 0; Gaps 0;

Qy 2436 GGATGAGAGGGGAGAGGT 2454
19 GGATGAGAGGGGAGAGGT 1

Db

```

RESULT 352
ADJ13109/C
ID ADJ13109 standard; DNA; 21 BP.
XX
XX
AC ADJ13109;
XX
XX
DT 20-MAY-2004 (first entry)
XX
DE Human DNA probe used to immobilise Cpg methylated DNA Seqid 236.
XX
XX probe; ss; chemical modification; methylation; array; Cpg island;
KM tumour suppressor; p16; human; H69; H1618.
XX
XX Homo sapiens.
OS
XX US2003152950-A1.
XX
XX 14-AUG-2003.
XX
XX 27-JUN-2002; 2002US-00184085.
XX
XX 27-JUN-2001; 2001US-0301370P.
XX
XX (GARN/) GARNER H R.
PA (MINN/) MINNA J D.
PA (LUEB/) LUEBKE K J.
PA (BALO/) BALOG R P.
XX
XX Garner HR, Minna JD, Luebke KJ, Balog RP;
PI
XX WPI; 2003-874843/81.
XX
XX Analysis of chemical modification of DNA involves obtaining sample of DNA
PT to be analyzed, treating DNA with chemical reagents that result in
PT different base sequences, and determining sequence of resulting DNA.
XX
XX Example 1; SEQ ID NO 236; 210pp; English.
XX
XX This invention relates to a novel method for analysing chemically
CC modified macromolecules. Specifically, it refers to a high throughput
CC method for the parallel analysis of many potential sites of chemical
CC modification (e.g. methylation) in DNA. The present invention describes
CC treating the DNA with one or more chemical reagents that result in
CC different base sequences depending upon the presence or absence of the
CC modification of interest. Accordingly, a device comprising an array of
CC probes is provided to hybridise with and select the altered DNA sequences
CC that comprise the modifications of interest such as a Cpg island. In
CC particular, this invention refers to analysing the methylation pattern of
CC a region of the promoter for the tumour suppressor gene p16 from two
CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
CC is a human DNA probe used to immobilise Cpg methylated DNA of the
CC invention.
XX
XX Sequence 21 BP; 3 A; 13 C; 0 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 4.6e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2436 GGATGAGAGGGGAGAGGT 2454
DB 20 GGATGAGAGGGGAGAGGT 2
XX
RESULT 353
ADJ13146/C
ID ADJ13146 standard; DNA; 21 BP.
XX
XX
AC ADJ13146;
XX
XX
DT 20-MAY-2004 (first entry)
XX
DE Human DNA probe used to immobilise Cpg methylated DNA Seqid 273.
XX

```

```

XX
XX KM probe; ss; chemical modification; methylation; array; Cpg island;
XX tumour suppressor; p16; human; H69; H1618.
XX
XX OS Homo sapiens.
XX
XX US2003152950-A1.
XX
XX 14-AUG-2003.
XX
XX 27-JUN-2002; 2002US-00184085.
XX
XX 27-JUN-2001; 2001US-0301370P.
XX
XX (GARN/) GARNER H R.
PA (MINN/) MINNA J D.
PA (LUEB/) LUEBKE K J.
PA (BALO/) BALOG R P.
XX
XX Garner HR, Minna JD, Luebke KJ, Balog RP;
PI
XX WPI; 2003-874843/81.
XX
XX Analysis of chemical modification of DNA involves obtaining sample of DNA
PT to be analyzed, treating DNA with chemical reagents that result in
PT different base sequences, and determining sequence of resulting DNA.
XX
XX Example 1; SEQ ID NO 273; 210pp; English.
XX
XX This invention relates to a novel method for analysing chemically
CC modified macromolecules. Specifically, it refers to a high throughput
CC method for the parallel analysis of many potential sites of chemical
CC modification (e.g. methylation) in DNA. The present invention describes
CC treating the DNA with one or more chemical reagents that result in
CC different base sequences depending upon the presence or absence of the
CC modification of interest. Accordingly, a device comprising an array of
CC probes is provided to hybridise with and select the altered DNA sequences
CC that comprise the modifications of interest such as a Cpg island. In
CC particular, this invention refers to analysing the methylation pattern of
CC a region of the promoter for the tumour suppressor gene p16 from two
CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
CC is a human DNA probe used to immobilise Cpg methylated DNA of the
CC invention.
XX
XX Sequence 21 BP; 4 A; 11 C; 0 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 4.6e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2436 GGATGAGAGGGGAGAGGT 2454
DB 19 GGATGAGATGGGAGAGGT 1
XX
RESULT 354
AAQ33557
ID AAQ33557 standard; DNA; 22 BP.
XX
XX
AC AAQ33557;
XX
XX
DT 25-MAR-2003 (revised)
DT 02-FEB-1993 (first entry)
XX
DE Microsatellite sequence from clone AGLA248.
XX
XX PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
KM genetic mapping; traits; amplification; ss.
XX
XX Bos taurus.
OS
XX WO9213102-A1.
XX

```

PD 06-AUG-1992.
 XX
 PF 15-JAN-1992; 92WO-US000340.
 XX
 PI 15-JAN-1991; 91US-00642342.
 PR
 XX (GENM-) GENMARK.
 PA
 PI Georges M, Maesey JM;
 XX
 XX WPI; 1992-284684/34.
 DR
 XX Polymorphic bovine DNA markers - used in genetic identification, gene
 PT mapping, and selective breeding.
 PT
 PS Table 7; Page 151; 517pp; English.
 XX
 CC The sequence is that of a bovine microsatellite sequence obt'd. by
 CC screening a library of bovine MboI DNA fragments of between 250 and 500
 CC bp with an (AC)₁₅ and a (TC)₁₅ oligonucleotide probe. One out of 50
 CC clones cross-hybridised. Assuming independent distribution of
 CC microsatellites and MboI sites, the frequency of (Tn)n >9 microsatellites
 CC in the bovine genome is estimated at >100, 000. The sequence information
 CC for ca. 230 such bovine microsatellites is summarised in the
 CC specification and indexed herein (see below). The sequences upstream and
 CC downstream of the microsatellite sequence were used to generate the
 CC required PCR primers for in vitro amplification of the corresp.
 CC microsatellite (using the program OPTIPRIM). The microsatellites may be
 CC used to identify individuals, for parentage testing, and in the genetic
 CC mapping of economic trait loci, or genes involved the determination of
 CC economically important traits esp. in cattle, to allow selective
 CC breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN
 CC field.)
 CC
 SQ Sequence 22 BP; 11 A; 0 C; 10 G; 0 T; 0 U; 1 Other;
 QY Query Match 0.3%; Score 17.4; DB 1; Length 22;
 Best Local Similarity 94.7%; Pred. No. 4.7e+02;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 DB 1180 AGAGAAGAAGAGAAGAAGA 1198
 3 AGAGAAGAAGAAGAAGAAGA 21
 RESULT 355
 AAS97748
 ID AAS97748 standard; DNA; 22 BP.
 XX
 AC AAS97748;
 XX
 DT 12-MAR-2002 (first entry)
 XX
 DE Murine SAC1 gene-specific oligonucleotide PCR primer #315.
 XX
 KW Human; mouse; SAC1; carbohydrate; sweetener; ethanol; alcoholism; ss;
 KW obesity; diabetes; transgenic embryo; body tissue; body fluid; pancreas;
 KW blood; tongue; PCR primer; anorectic; antidiabetic; gene therapy;
 KW protein replacement therapy.
 XX
 OS Mus sp.
 XX
 PN WO200183749-A2.
 XX
 PD 08-NOV-2001.
 XX
 PF 25-APR-2001; 2001WO-US013387.
 XX
 XX 28-APR-2000; 2000US-0200794P.
 PR 28-JUL-2000; 2000US-0221419P.
 PR 10-NOV-2000; 2000US-0247443P.
 XX
 PA (WARN) WARNER LAMBERT CO.

PA (MONE-) MONELL CHEM SENSES CENT.
 XX
 PI Bachmanov AA, Beauchamp GK, Chatterjee A, De Jong PJ, Li S, Li X;
 PI Ohmen UD, Reed DR, Ross D, Tordoff MG;
 XX
 DR WPI; 2002-075162/10.
 PT
 PT Novel isolated polypeptide comprising variant form of mouse or human SAC1
 PT polypeptide, and is associated with altered preference for carbohydrates
 PT or other sweeteners, useful for preventing obesity, diabetes, alcoholism.
 XX
 PS Claim 14; Page 86; 239pp; English.
 XX
 CC The invention relates to an isolated polypeptide, comprising a variant
 CC form of mouse or human SAC1 polypeptide. The variant form is associated
 CC with altered preference for carbohydrates, other sweeteners or ethanol.
 CC The polypeptide and its associated DNA sequence can be produced by
 CC recombinant techniques and is useful for preventing obesity, diabetes or
 CC alcoholism associated with SAC1 expression. The sequences are useful in
 CC screening for drugs and sweeteners. Recombinant cell lines and transgenic
 CC embryos may be used in screening for and identifying agents that induce
 CC or repress function of SAC1. Predisposition to diabetes, obesity or
 CC alcoholism can be ascertained by testing any fluid or tissue of a human
 CC (such as blood, pancreas or tongue) for sequence variations of the SAC1
 CC gene. A sequence variation of the SAC1 locus may indicate a
 CC predisposition to diabetes, obesity and/or alcoholism and may provide a
 CC diagnostic mark. The polynucleotide can be detected in a biological
 CC sample by contacting the DNA with a probe to form a hybridisation complex
 CC which is then detected. The sequences represent cDNA encoding human and
 CC mouse SAC1 polypeptides and PCR primers specific for the SAC1 genes
 CC
 SQ Sequence 22 BP; 8 A; 8 C; 2 G; 4 T; 0 U; 0 Other;
 QY Query Match 0.3%; Score 17.4; DB 1; Length 22;
 Best Local Similarity 94.7%; Pred. No. 4.7e+02;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 DB 3597 TCAGGCTAATCTCAAACTC 3615
 1 TCAGGCTAATCTCAAACTC 19
 RESULT 356
 ACA89735
 ID ACA89735 standard; DNA; 22 BP.
 XX
 AC ACA89735;
 XX
 DT 09-JUL-2003 (first entry)
 XX
 DE Herbicide resistance polymorphic marker related primer #34.
 XX
 DE Polymorphic marker; herbicide resistance; herbicide susceptible plant;
 KW herbicide resistant plant; Conyza canadensis; Lolium rigidum; goosegrass;
 KW glyphosate; paraquat; sulfonyl urea moiety; PCR; primer; ss.
 XX
 OS Synthetic.
 XX
 PN WO2003031937-A2.
 XX
 PD 17-APR-2003.
 XX
 PF 11-OCT-2002; 2002WO-US032637.
 XX
 PR 12-OCT-2001; 2001US-0328750P.
 XX
 PA (MORP-) MORPHOTEK INC.
 XX
 PI Chao Q, Grasso L, Nicolalde NC, Sass PM;
 XX
 DR WPI; 2003-430273/40.
 XX
 PT Identifying polymorphic markers of herbicide resistance in a plant, by

PT analyzing genomic DNA of herbicide resistant and susceptible plants, and
 PT identifying difference that correlate with resistance or susceptibility.
 XX
 PS Example 6, Page 38, 168pp; English.
 XX
 CC The invention describes a method of identifying polymorphic markers of
 CC herbicide resistance in a plant. The method involves: isolating genomic
 CC DNA from an herbicide susceptible plant and an herbicide resistant plant
 CC of the same species, performing genetic analysis and identifying
 CC differences between their genomic DNA, identifying the difference that
 CC correlate with herbicide resistance or susceptibility, thus identifying
 CC polymorphic markers. The method is useful for identifying polymorphic
 CC markers of herbicide resistance in a plant e.g. *Conyza canadensis*, *Lolium*
 CC rigidum and goosegrass species, where the herbicides include glyphosate,
 CC paraquat and sulfonyl urea moieties. This sequence represents a primer
 CC associated with the identification of polymorphic markers of herbicide
 CC resistance
 CC
 SQ Sequence 22 BP; 10 A; 0 C; 11 G; 0 T; 0 U; 1 Other;
 XX
 QY 1180 AGAGAAAGAGAGAGAGA 1198
 DB 2 AGAGAGAGAGAGAGAGA 20
 XX
 RESULT 357
 ADM16088
 ID ADM16088 standard; DNA; 22 BP.
 XX
 AC ADM16088;
 XX
 DT 15-JUL-2004 (first entry)
 XX
 DE Murine SAC1 DNA PCR primer #315.
 XX
 KM Mouse; SAC1; PCR; ss; carbohydrate; sweetener; ethanol; obesity;
 KM diabetes; alcoholism; antidiabetic; alcohol; anorectic; antialcoholic;
 KM primer.
 XX
 OS Mus musculus.
 XX
 PN US2004081964-A1.
 XX
 PD 29-APR-2004.
 XX
 PF 25-OCT-2002; 2002US-00280183.
 XX
 PR 25-OCT-2002; 2002US-00280183.
 XX
 PA (BACH/) BACHMANOV A A.
 PA (BEAU/) BEAUCHAMP G K.
 PA (LISS/) LI S.
 PA (LIKK/) LI X.
 PA (REED/) REED D R.
 PA (TORD/) TORDOFF M G.
 PA (ROSS/) ROSS D A.
 PA (OHMA/) OHMAN J D.
 PA (CHAT/) CHATTERJEE A.
 PA (DJON/) DE JONG P J.
 XX
 PI Bachmanov AA, Beauchamp GK, Li S, Li X, Reed DR, Tordoff MG;
 PI Ross DA, Ohman JD, Chatterjee A, De Jong PJ;
 XX
 DR WPI; 2004-340133/31.
 XX
 PT New isolated polynucleotides for sensing carbohydrates, other sweeteners,
 PT or ethanol, useful for screening drugs for inhibition or restoration of
 PT gene function as antidiabetic, antioesity or antialcohol consumption
 PT therapies.

XX
 PS Example 12; SEQ ID NO 358; 148pp; English.
 XX
 CC The invention relates to SAC1 polypeptides and the polynucleotides
 CC encoding them. The polynucleotides contain a variation associated with
 CC sensing carbohydrates, other sweeteners or ethanol. The invention also
 CC relates to a method for analysing a biomolecule in a biological sample,
 CC comprising altering SAC1 activity in the sample and measuring the
 CC activity, a method for analysing a polynucleotide in a biological sample,
 CC comprising contacting a polynucleotide in a biological sample with a
 CC probe where the probe hybridises to a SAC1 polynucleotide to form a
 CC hybridisation complex and detecting the hybridisation complex, a method
 CC of identifying susceptibility to obesity or diabetes comprising comparing
 CC the nucleotide sequence of the suspected SAC1 allele with a wild type
 CC nucleotide sequence, where the difference between the suspected allele
 CC and the wild-type sequence identifies a sequence variation of the SAC1
 CC nucleotide sequence, and a method of treating or preventing obesity,
 CC diabetes or alcoholism associated with expression of SAC1, comprising
 CC administering to a subject a pharmaceutical composition and a transgenic
 CC animal that carries an altered SAC1 allele. The methods and compositions
 CC of the invention are useful for screening drugs for inhibition or
 CC restoration of gene function as antidiabetic, antioesity or antialcohol
 CC consumption therapies and for identifying sweeteners and alcohols. This
 CC sequence represents a PCR primer used to amplify murine SAC1 DNA of the
 CC invention.
 CC
 SQ Sequence 22 BP; 8 A; 8 C; 2 G; 4 T; 0 U; 0 Other;
 XX
 QY 3597 TCAGGCTATCTCAAACTC 3615
 DB 1 TCAGGCTATCTCAAACTC 19
 XX
 RESULT 358
 AAT13515
 ID AAT13515 standard; DNA; 23 BP.
 XX
 AC AAT13515;
 XX
 DT 20-NOV-1996 (first entry)
 XX
 DE Telomere mapping primer (TelG) for Xp/Yp PAR1 proximal target.
 XX
 KM Human; Xp/Yp; pseudautosomal region; PAR1; telomere repeat array;
 KM allele primer; genomic DNA; characterisation; amplification;
 KM internal repeat unit; detection; disease predisposition; abnormal;
 KM cell growth; cell division; diagnosis; family relationship;
 KM telomere mapping; human chromosome; flanking sequence;
 KM cancer identification; ss.
 XX
 OS Homo sapiens.
 XX
 PN GB2294322-A.
 XX
 PD 24-APR-1996.
 XX
 PF 19-OCT-1995; 95GB-00021447.
 XX
 PR 21-OCT-1994; 94GB-00021234.
 XX
 PR 21-MAY-1995; 95GB-00010639.
 XX
 PA (ZENB) ZENBECA LTD.
 XX
 PI Baird DM, Royle NJ, Jeffreys AJ;
 XX
 DR WPI; 1996-190531/20.
 XX
 PT Characterising genomic DNA by amplifying selected internal repeat units -
 PT in telomere repeat array used for, e.g. disease diagnosis, determin. of

PT family relationships, telomere mapping, etc.
XX
PS Claim 20; Page 53; 68bp; English.
XX
CC A sequence proximal to the human Xp/Yp pseudoautosomal region (PAR1)
CC telomere repeat array, was produced using sequence information obtcd. from
CC 32 Caucasian and 21 African DNAs. The sequence was found to contain 20
CC substitution polymorphisms, and a 10 bp deletion/insertion polymorphism
CC found only in African DNAs. Claimed type specific primers, which
CC hybridise to loci contained in the sequence, can be used for the
CC characterisation of a genomic DNA test sample by amplifying selected
CC internal repeat units in a telomere repeat array. This characterisation
CC is useful in the detection of inherited or acquired disease
CC predisposition, abnormal cell division or growth diagnosis (e.g. cancer),
CC individual and family relationship identification and telomere mapping of
CC human chromosomes from DNA flanking sequences, i.e. 2 state mapping using
CC the present sequence
XX
SQ Sequence 23 BP; 3 A; 16 C; 0 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 17.4; DB 1; Length 23;
Best Local Similarity 94.7%; Pred. No. 4.7e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 228 CCTCACCTCACCCTCC 246
DB 1 CCTCACCTCACCCTCACC 19
XX
RESULT 359
AAL57030/c
ID AAL57030 standard; DNA; 23 BP.
XX
AC AAL57030;
XX
DT 11-MAR-2004 (first entry)
XX
DE Murine VE-PTP coding sequence PCR primer #2.
XX
KW Vascular endothelial protein-tyrosine phosphatase; VE-PTP; mouse; human;
KW gene therapy; cytosolic; VE-cadherin; PCR; primer; ss;
KW vascular endothelial-cadherin.
XX
OS Mus sp.
XX
PN WO2003084565-A2.
XX
PD 16-OCT-2003.
XX
PF 08-APR-2003; 2003WO-EP003645.
XX
PR 08-APR-2002; 2002EP-00007837.
XX
PI (PLAC) MAX PLANCK GES FÖRDERUNG WISSENSCHAFTEN.
XX
PI Nawroth R, Deutsch U, Vestweber D, Shima DT, Golding M;
XX
DR WPI; 2003-804251/75.
XX
PT Use of the polypeptide comprising vascular endothelial-protein tyrosine
PT phosphatase (VE-PTP) or the nucleic acid encoding the polypeptide for the
PT manufacture of an agent for monitoring or modulating VE-cadherin mediated
PT disorders.
XX
PS Example; Page 17; 0pp; English.
XX
CC The present invention relates to a polypeptide comprising vascular
CC endothelial-protein tyrosine phosphatase (VE-PTP) or its active fragment
CC or effector, or the nucleic acid encoding the polypeptide or its
CC effector, for use in the manufacture of an agent for monitoring or
CC modulating VE-cadherin mediated processes or disorders. The polypeptide
CC comprising vascular endothelial-protein tyrosine phosphatase (VE-PTP) or
CC its active fragment or effector, or the nucleic acid encoding the

CC polypeptide or its effector, is useful for the manufacture of an agent
CC for monitoring or modulating VE-cadherin mediated processes or disorders,
CC e.g., cancer. The present sequence is a PCR primer shown in the
CC exemplification of the invention
XX
SQ Sequence 23 BP; 0 A; 0 C; 0 G; 22 T; 0 U; 1 Other;
XX
Query Match 0.3%; Score 17.4; DB 1; Length 23;
Best Local Similarity 82.6%; Pred. No. 4.7e+02;
Matches 19; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
QY 5392 TAAAAAATACAAAAAGAAAA 5414
DB 23 BAAAAAATAAAAAA 1
XX
RESULT 360
AD017957/c
ID AD017957 standard; DNA; 24 BP.
XX
AC AD017957;
XX
DT 01-JUL-2004 (first entry)
XX
DE Primer of the invention #183.
XX
KW single nucleotide polymorphism; primer; ss.
XX
OS Synthetic.
XX
PN WO2004003220-A2.
XX
PD 08-JAN-2004.
XX
PF 26-JUN-2003; 2003WO-US020150.
XX
PR 28-JUN-2002; 2002US-0392504P.
XX
PI (ORCH-) ORCHID BIOSCIENCES INC.
XX
PI Giles R, Baisch JM, McKeown B, Stolorow M;
XX
DR WPI; 2004-091088/09.
XX
PT New panel of single nucleotide polymorphisms comprising two or more
PT single nucleotide polymorphisms, useful for analyzing compromised nucleic
PT acid samples.
XX
PS Disclosure; SEQ ID NO 184; 76bp; English.
XX
CC The present invention relates to a panel of two or more single nucleotide
CC polymorphisms, where each of the polymorphisms of the panel are selected
CC from single nucleotide polymorphisms that are not genetically linked with
CC respect to one another, and where each of the polymorphisms of the panel
CC are selected from single nucleotide polymorphisms that are located
CC outside tandem repeat nucleic acid sequences. The known sample and the
CC unknown sample are from the same individual. The known sample is from a
CC family member. The compromised nucleic acid sample comprises nucleic acid
CC fragments from 10-100 nucleotides in length. The identity of the one or
CC more single nucleotide polymorphisms is determined using a single base
CC primer extension reaction. The present sequence represents a primer of
CC the invention.
XX
SQ Sequence 24 BP; 0 A; 10 C; 0 G; 14 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 17.4; DB 1; Length 24;
Best Local Similarity 94.7%; Pred. No. 4.7e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1182 AGAAGAAGAGAGAGAAA 1200
DB 20 AGAAGAAGAGAGAGAAA 2


```

RESULT 361
AA064724 standard; cDNA to mRNA; 22 BP.
ID AA064724
XX
AC AA064724;
XX
DT 25-MAR-2003 (revised)
DT 04-JAN-1995 (first entry)
XX
DE 2',5'-linked tetraadenylate-anti(dT)18 oligonucleotide chimeric mol.
XX
XX antisense; 2',5'-tetraadenylate; 2-5A dependent RNase activator;
XX RNA cleavage; antiviral therapy; chimeric molecule; PKR;
XX protein synthesis regulation; phosphorylation; eIF-2alpha;
XX eukaryotic translation initiation factor; 88.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..4
FT /tag= a
FT /label= 2',5'-linked tetraadenylate
FT /note= "nucleotides linked through phosphodiester bonds
FT at hydroxyl groups of 2' and 5' carbons"
FT 4..5
FT /tag= b
FT /note= "the 2-5A moiety (*tag = a) and the antisense DNA
FT sequence (*tag = c) are linked by two 1,4-butanediol
FT molecules linked through phosphodiester bonds"
FT 5..22
FT /tag= c
FT /note= "antisense region, complementary to oligo dT"
XX
XX WO9409129-A2.
XX
XX 28-APR-1994.
XX
XX 20-OCT-1993; 93MO-US010103.
XX
XX 21-OCT-1992; 92US-00965666.
XX
XX 17-SEP-1993; 93US-00123449.
XX
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX (CLEV-) CLEVELAND CLINIC RES INST.
XX
XX Torrence P, Silverman R, Maitra R, Lesiak K;
XX
XX WPI; 1994-151315/18.
XX
XX Specific cleavage of RNA, useful partic. for treating viral infection,
XX cancers, etc. - by using anti-sense oligo:nucleotide coupled to activator
XX of 2-5A dependent RNase.
XX
XX Example 9; Page 66; 86pp; English.
XX
XX This sequence was used to determine whether 2-5A-antisense chimeric
XX molecules are inhibitory to cell growth. The molecules AA064709, AA064711
XX and AA064724 all lacked cytotoxicity. In the novel 2-5A-antisense
XX oligonucleotide chimeric molecules, the antisense region targets the
XX chimeric molecule to a particular region of RNA to be specifically
XX cleaved and the 2',5'-linked tetraadenylate tail activates the 2-5A
XX RNase. Typical applications are treatment of viral infections (esp. for
XX cleavage of an RNA virus genome), cancer; leukaemia, cardiovascular
XX disorders (e.g. restenosis after angioplasty), genetic disorders,
XX osteoarthritis or rheumatoid arthritis. (Updated on 25-MAR-2003 to
XX correct FN field.)
XX
XX Sequence 22 BP; 22 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 17.2; DB 1; Length 22;
Best Local Similarity 86.4%; Pred. No. 5e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

```

QY 5393 AAAAAAAAAACAAAAAGAAAAA 5414
DB 1 AAAAAAAAAAAAAAAAAAAAAA 22

RESULT 362
AA017413
ID AA017413 standard; DNA; 22 BP.
XX
AC AA017413;
XX
DT 09-MAR-2001 (first entry)
XX
XX L1 cleavage site related sequence #3.
XX
XX L1 cleavage site related sequence #3.
XX
XX Retrotransposon; genetic defect; cystic fibrosis; dg.
XX
XX Unidentified.
XX
XX US6150160-A.
XX
XX 21-NOV-2000.
XX
XX 28-APR-1997; 97US-00847844.
XX
XX 16-NOV-1995; 95US-0006831P.
XX 15-NOV-1996; 96US-00749805.
XX
XX (UYJO ) UNIV JOHNS HOPKINS.
XX (UYPE-) UNIV PENNSYLVANIA.
XX
XX Moran JV, Dombroski BA, Kazazian HH, Boeke JD;
XX
XX WPI; 2001-060015/07.
XX
XX DNAC comprising a promoter P and an L1 cassette sequence having a core
XX retrotransposon element, useful for random insertion of a heterologous or
XX homologous DNA sequence into a cell genome and for correcting genetic
XX defects.
XX
XX Disclosure; Fig 14; 87pp; English.
XX
XX The present invention relates to DNA for a promoter and an L1 cassette
XX sequence having a core retrotransposon element. The invention is useful
XX for random insertion of a heterologous or homologous DNA sequence into a
XX cell genome, and for correction of a genetic defect in the cell into
XX which the insertion is made. Genetic defects which may be corrected
XX includes cystic fibrosis, mutations in the dystrophin gene, genetic
XX defects associated with blood clotting and other genetic defects
XX
XX Sequence 22 BP; 22 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 17.2; DB 1; Length 22;
Best Local Similarity 86.4%; Pred. No. 5e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAACAAAAAGAAAAA 5414
DB 1 AAAAAAAAAAAAAAAAAAAAAA 22

RESULT 363
AD012348
ID AD012348 standard; DNA; 22 BP.
XX
AC AD012348;
XX
XX 12-FEB-2004 (first entry)
XX
XX L1 retrotransposon endonuclease cleavage site seq 1d 94.
XX
XX gene therapy; insertional mutation; germ line specific promoter;

```

```

KW mutation generation; transgenic animal; poly A element; non-LTR;
KW retrotransposon; long terminal repeats; L1; EN domain; endonuclease;
KW cleavage site; ds.
XX
XX Homo sapiens.
XX
XX US2003121063-A1.
XX
XX
XX 26-JUN-2003.
XX
XX
XX 09-AUG-2002; 2002US-00216122.
XX
XX
XX 16-NOV-1995; 95US-0006831P.
XX 15-NOV-1996; 96US-00749805.
XX 28-APR-1997; 97US-00847844.
XX 01-SEP-2000; 2000US-00653812.
XX
XX (UYPE-) UNIV PENNSYLVANIA.
XX
XX Kazazian HH, Ostertag E, Deberardinis R;
XX
XX WPI; 2003-863454/80.
XX
XX
XX Creating an insertional mutation in the germ line of an animal, useful
XX for generating a mutation in an offspring of an animal, comprises
XX introducing into an animal a nucleic acid molecule comprising a germ line
XX specific promoter.
XX
XX Example 2; SEQ ID NO 94; 102pp; English.
XX
XX The invention describes a method of creating an insertional mutation in
XX the germ line of an animal by introducing into an animal a nucleic acid
XX molecule comprising a germ line specific promoter. The method is useful
XX for generating a mutation in an offspring of an animal, or for isolating
XX a nucleic acid from a genome of an offspring of an animal. The method may
XX also be used to correct genetic defects in animals, especially humans.
XX The nucleic acid is useful for generating mutations in a cell for
XX assessing the frequency with which selected cells under go insertional
XX mutagenesis for the generation of transgenic animals. This sequence
XX represents an exemplary cleavage site of the endonuclease encoded by
XX human L1 retrotransposon EN domain.
XX
XX
XX Sequence 22 BP; 22 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.3%; Score 17.2; DB 1; Length 22;
XX Best Local Similarity 86.4%; Pred. No. 5e+02;
XX Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX
XX 5393 AAAAAAAAAATCAAAAAAAAAAGAAAA 5414
XX
XX 1 AAAAAAAAAAAAAAAAAAAAAAAAAA 22
XX
XX
XX RESULT 364
XX ADQ25630/c
XX ID ADQ25630 standard; cDNA; 22 BP.
XX
XX AC ADQ25630;
XX
XX
XX 23-SEP-2004 (first entry)
XX
XX
XX Junction-specific poly(A) cDNA primer.
XX
XX Cystic fibrosis; muscular dystrophy; diabetes; gene discovery;
XX gene mapping; molecular haplotyping; agricultural research;
XX prostate cancer; breast cancer; lung cancer; colon cancer;
XX ovarian cancer; human; adenorectal carcinoma; primer; ss.
XX
XX
XX Unidentified.
XX
XX
XX US2004126770-A1.
XX
XX
XX 01-JUL-2004.
XX

```

```

XX
XX 31-DEC-2002; 2002US-00335573.
XX
XX 31-DEC-2002; 2002US-00335573.
XX
XX (KUMA/) KUMAR G.
XX (ABAR/) ABARZUA P.
XX
XX Kumar G, Abarzua P;
XX
XX WPI; 2004-499113/47.
XX
XX
XX Amplifying RNA sequences, useful in detecting diseases or mutation,
XX comprises synthesizing first strand cDNA, circularizing first strand
XX cDNA, and replicating the circularized cDNA molecules by rolling circle
XX replication.
XX
XX Disclosure; SEQ ID NO 6; 64pp; English.
XX
XX The present invention relates to composition and method for amplifying
XX RNA sequences. The method involves synthesizing first strand cDNA
XX molecules from RNA molecules, circularizing the first strand and
XX replicating the circularized first strand cDNA molecules using rolling
XX circle replication. The method is useful for producing nucleic acid
XX molecules corresponding to RNA molecules in an RNA sample, for
XX identifying or analyzing and comparing RNA molecules and/or sequences
XX expressed in different cells, tissues and/or samples. The invention is
XX also useful in detecting disease (e.g. cystic fibrosis, muscular
XX dystrophy or diabetes), mutation detection, gene discovery, gene mapping
XX (molecular haplotyping), agricultural research, and assessment of
XX predisposition for cancers, e.g. prostate, breast, lung, colon or ovarian
XX cancer. The present sequence is a junction-specific cDNA primer. This
XX sequence is used to illustrate the method of invention.
XX
XX
XX Sequence 22 BP; 0 A; 0 C; 0 G; 22 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.3%; Score 17.2; DB 1; Length 22;
XX Best Local Similarity 86.4%; Pred. No. 5e+02;
XX Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX
XX 5393 AAAAAAAAAATCAAAAAAAAAAGAAAA 5414
XX
XX 22 AAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX
XX
XX RESULT 365
XX ADQ80747
XX ID ADQ80747 standard; DNA; 22 BP.
XX
XX AC ADQ80747;
XX
XX
XX 23-SEP-2004 (first entry)
XX
XX
XX Porcine KVLQTL intron 12 DNA sequence polymorphism oligonucleotide.
XX
XX Anorectic; Antidiabetic; Muscular; Gene Therapy; Cpg island;
XX IGF2 gene intron 3; muscle mass; fat deposition; teat number; obesity;
XX muscle deficiency; diabetes; SNP; single nucleotide polymorphism; ss.
XX
XX
XX Sus scrofa.
XX
XX
XX Key Location/Qualifiers
XX variation replace(13..T)
XX /*tag= a
XX /standard_name= "Single_nucleotide_polymorphism"
XX
XX BP1437418-A1.
XX
XX
XX 14-JUL-2004.
XX
XX
XX 10-JAN-2003; 2003BP-00075091.
XX
XX
XX 10-JAN-2003; 2003BP-00075091.
XX

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```

XX (UyLi-) UNIV LIEGE.
PA (MELI-) MELICA HB.
PA (GENT-) GENTEC BV.
XX
PI Andersson L, Andersson G, Georges M, Buys N,
XX WPI, 2004-501307/48.
XX
PT Selecting an animal for desired genotypic or potential phenotypic
PT properties such as muscle mass and/or fat deposition, comprises testing
PT for a single nucleotide polymorphism in intron 3 of the IGF2 gene.
XX
PS Example 1, Page 20; 38pp; English.
XX
CC The present invention relates to a method (M1) for selecting an animal
CC for having desired genotypic or potential phenotypic properties. (M1)
CC comprises testing the animal for the presence of a nucleic acid
CC modification affecting the activity of an evolutionarily conserved Cpg
CC island located in intron 3 of an IGF2 gene, and/or binding of a nuclear
CC factor to an IGF2 gene. The nuclear factor is capable of binding to a
CC stretch of nucleotides which in the wild type pig, mouse or human IGF2
CC gene is part of an evolutionarily conserved Cpg island, located in intron 3
CC of the IGF2 gene. The stretch is functionally equivalent to (ADQ80709).
CC The nucleic acid modification in ADQ80709 comprises a G to A transition
CC at IGF2-intron3-nt1072. (M1) is useful for selecting an animal with
CC properties related to muscle mass, fat deposition, and/or test number.
CC Also claimed is a method (M2) for modulating mRNA transcription of an
CC IGF2 gene by modulating the activity of an evolutionarily conserved Cpg
CC island located in intron 3 of an IGF2 gene and/or modulating binding of a
CC nuclear factor to an IGF2 gene. Also claimed is a method (M3) for
CC identifying a compound capable of modulating mRNA transcription of an
CC IGF2 gene and a method (M4) for identifying a compound capable of an
CC modulating binding of a nuclear factor to an IGF2 gene. (M2) is useful
CC for modulating mRNA transcription of an IGF2 gene in a cell or organism.
CC (M3) and (M4) are useful for identifying compounds capable of modulating
CC mRNA transcription of an IGF2 gene and/or modulating binding of a nuclear
CC factor to an IGF2 gene. Compounds identified are potentially useful for
CC treating obesity, muscle deficiencies and diabetes. The present sequence
CC is a porcine sequence tagged sites (STS) comprising a DNA sequence
CC polymorphism, which was isolated in an example from the invention.
XX
SQ Sequence 22 BP; 2 A; 7 C; 11 G; 2 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 17.2; DB 1; Length 22;
Best Local Similarity 86.4%; Pred. No. 5e+02; 3; Indels 0; Gaps 0;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 525 GGCTGGCGAGACCTGGGCGCC 546
Db 1 GGCTGGCGAGACCTGGGCGCC 22
XX
RESULT 366
AAQ30430/c
ID AAQ30430 standard; DNA; 23 BP.
XX
AC AAQ30430;
XX
XX 25-MAR-2003 (revised)
DT 07-DEC-1992 (first entry)
XX
DE Oligomer IL6803 for forming triplex with HUM16 target duplex.
XX
XX Human interleukin-6 gene; herpes simplex; AIDS; modified; HIV; RSV; HPV;
XX malignancy; hepatitis; inflammation; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX FT /mod_base= OTHER
XX FT

```

```

FT FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT misc_feature 11..12
FT /*tag= d
FT /note= "o-xyloso dimer synthon linkage"
FT misc_feature 12..23
FT /*tag= c
FT /label= "inverted polarity_region"
FT /note= "see comments"
FT modified_base 23
FT /*tag= b
FT /mod_base= OTHER
FT FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
XX
XX WO9209705-A1.
XX
PD 11-JUN-1992.
XX
XX 25-NOV-1991; 91WO-US008811.
XX
XX 23-NOV-1990; 90US-00617907.
XX 18-JAN-1991; 91US-00643382.
XX 08-APR-1991; 91US-00683420.
XX 17-APR-1991; 91US-00686544.
XX 17-APR-1991; 91US-00686546.
XX 17-APR-1991; 91US-00686547.
XX 27-SEP-1991; 91US-00766733.
XX
XX (GILR-) GILEAD SCI INC.
XX
XX Froehner B, Krawczyk S, Matteucci MD, Milligan J;
XX WPI, 1992-217083/26.
XX
PT New oligomers congt. modified bases - which form a triplex with G-C
PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
PT herpes malignancy and inflammation.
XX
XX Claim 12; Page 71; 77pp; English.
XX
CC The synthetic oligomer is capable of forming a triplex at physiological
CC pH with a purine rich target sequence by coupling into the major groove
CC of the duplex. The specific target sequence of this oligomer is the human
CC interleukin 6 gene untranslated sequence congt. a purine rich sequence
CC concd. on one strand of the duplex. The oligomer, and others like it are
CC useful in diagnosis and therapy of diseases characterised by specific DNA
CC duplex targets, e.g. HPV, HER, HIV, hepatitis B, herpes, malignant
CC tumours and inflammation. The triple helices form under mild conditions
CC thus assays may be carried out without subjecting the test specimen to
CC harsh conditions. The oligomer contains an inverted polarity region
CC formed from an o-xyloso dimer synthon. The linking gp. is o-xyloso
CC (nucleotides have the 3' positions of xylose sugars linked via the o-
CC xyloene ring). Two nucleotides are coupled through a xyloene residue to
CC form the dimer synthon. This additional modifications may render the
CC oligomer stable to nuclease activity. The oligomer is able to inhibit
CC gene expression, as verified by in vitro systems. See also AAQ25452-25501
CC and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX
SQ Sequence 23 BP; 2 A; 0 C; 0 G; 21 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 17.2; DB 1; Length 23;
Best Local Similarity 86.4%; Pred. No. 5e+02; 3; Indels 0; Gaps 0;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 5395 AAAAATTCAAAAAGAAAAAT 5416
Db 22 AAAAAAAAAAAAAAAAAAAAAAT 1
XX
RESULT 367
AAQ30431/c
ID AAQ30431 standard; DNA; 23 BP.
XX
XX AC AAQ30431;
XX

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XX 25-MAR-2003 (revised)
DT 07-DEC-1992 (first entry)
XX
DE Oligomer IL6804 for forming triplex with HDML6 target duplex.
XX
XX Human interleukin-6 gene; herpes simplex; AIDS; modified; HIV; RSV; HPV;
KW malignancy; hepatitis; inflammation; ss.
XX
XX Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /*mod_base= OTHER
FT /*note= "OTHER= N4 N4 ethanocytosine"
FT misc_feature 11..12 /*tag= d
FT /*note= "o-xyloso dimer synthon linkage"
FT misc_feature 12..23 /*tag= c
FT /*label= inverted polarity_region
FT /*note= "see comments"
FT modified_base 23 /*tag= b
FT /*mod_base= OTHER
FT /*note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
XX
XX MO9209705-A1.
XX
XX 11-JUN-1992.
XX
XX 25-NOV-1991; 91WO-05008811.
XX
XX 23-NOV-1990; 90US-00617907.
XX 18-JAN-1991; 91US-00643382.
XX 08-APR-1991; 91US-00683420.
XX 17-APR-1991; 91US-00686544.
XX 17-APR-1991; 91US-00686546.
XX 17-APR-1991; 91US-00686547.
XX 27-SEP-1991; 91US-00766733.
XX
XX (GILE-) GILEAD SCI INC.
XX
XX Froehler B, Krawczyk S, Matteucci MD, Milligan J;
XX
XX WPI; 1992-217083/26.
XX
XX New oligomers contg. modified bases - which form a triplex with G-C
XX doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
XX herpes malignancy and inflammation.
XX
XX Claim 12; Page 71; 77pp; English.
XX
XX The synthetic oligomer is capable of forming a triplex at physiological
XX pH with a purine rich target sequence by coupling into the major groove
XX of the duplex. The specific target sequence of this oligomer is the human
XX interleukin 6 gene untranslated sequence contg. a purine rich sequence
XX concd. on one strand of the duplex. The oligomer, and others like it are
XX useful in diagnosis and therapy of diseases characterised by specific DNA
XX duplex targets, e.g. HPV, HBV, HEV, HIV, hepatitis B, herpes, malignant
XX tumours and inflammation. The triple helices form under mild conditions
XX thus assays may be carried out without subjecting the test specimen to
XX harsh conditions. The oligomer contains an inverted polarity region
XX formed from an o-xyloso dimer synthon. The linking gp. is o-xyloso
XX (nucleosides have the 3'positions of xylose sugars linked via the o-
XX xylylene rings). Two nucleosides are coupled through a xylylene residue to
XX form the dimer synthon. This additional modifications may render the
XX oligomer stable to nuclease activity. The oligomer is able to inhibit
XX gene expression, as verified by in vitro systems. See also AAQ25452-25501
XX and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 23 BP; 1 A; 1 C; 0 G; 21 T; 0 U; 0 Other;
SQ

```

```

Query Match 0.3%; Score 17.2; DB 1; Length 23;
Best Local Similarity 86.4%; Pred. No. 5e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5392 TAAAAAATTCAAAAAGAAA 5413
DB 23 TAAAAAATTCAAAAAGAAA 2

RESULT 368
ABL56769
ID ABL56769 standard; DNA; 23 BP.
XX
XX ABL56769;
AC
XX
XX 20-AUG-2002 (first entry)
DT
XX
XX Sequence of an oligonucleotide used for triple helix construction.
DE
XX
XX Nucleic acid detection; nucleic acid labelling; gene therapy;
KW
XX
XX Nucleic acid purification; triple helix; ss.
XX
XX Synthetic.
OS
XX
XX WO200077250-A2.
XX
XX 21-DEC-2000.
XX
XX 14-JUN-2000; 2000WO-FR001655.
XX
XX 14-JUN-1999; 99FR-00007503.
XX
XX (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.
XX (CNRS ) CNRS CENT NAT RECH SCI.
XX
XX Escude C, Garestier T, Helene C, Roulon T;
XX
XX WPI; 2001-080698/09.
XX
XX Circularizing oligonucleotide around double-stranded nucleic acid, useful
XX e.g. for detecting mutations, using target-binding oligonucleotide with
XX complementary end sequences.
XX
XX Example 10; Page 40; 91pp; French.
XX
XX The specification describes a process for circularizing an
XX oligonucleotide around a double-stranded nucleic acid that contains a
XX target sequence. The method is used to detect or label nucleic acids,
XX particularly plasmids, to detect target sequences in the nucleic acid,
XX and to distinguish between two sequences that differ in only 1 or 2
XX mutations. It can be used to select, e.g. from degenerate single-stranded
XX nucleic acids, sequences that can bind to the nucleic acid, particularly
XX sequences that promote entry of the nucleic acid into cells or can target
XX the nucleic acid to specific cellular compartments. The method can also
XX be used to purify nucleic acids, particularly plasmids, and in gene
XX therapy for specific inhibition of a gene contained in the nucleic acid.
XX The present sequence represents an oligonucleotide used in the course of
XX the invention, during construction of a triple helix
XX
XX Sequence 23 BP; 11 A; 0 C; 12 G; 0 T; 0 U; 0 Other;
SQ

Query Match 0.3%; Score 17.2; DB 1; Length 23;
Best Local Similarity 86.4%; Pred. No. 5e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2560 GATGAGGGGGAAGAGAGATGG 2581
DB 2 GAAAGGGGGAAGAGAGAGAGG 23

RESULT 369
AAFL6627/C

```

```

ID  AAF16627 standard; DNA; 23 BP.
XX
XX  AAF16627;
AC
XX  13-MAR-2001 (first entry)
DT
XX  Gastric acid production inhibiting oligonucleotide SEQ ID NO: 114.
DE
XX  Gastric acid disturbance; gastric reflux; gastritis; dyspepsia;
KM  stomach ulcer; duodenal ulcer; Helicobacter pylori; antisense;
KW  DNA-RNA hybrid; ss.
XX
XX  Homo sapiens.
OS
XX  WO200071164-A1.
PN
XX  30-NOV-2000.
PD
XX  24-MAY-2000; 2000MO-AU000498.
PP
XX  24-MAY-1999; 99AU-000000510.
PR
XX  (TACH/) TACHAS G.
PA
XX  Tachas G;
PI
XX  WPI; 2001-025093/03.
DR
XX  Treating gastric acid disturbance by administering an oligonucleotide
PT  which modulates the activity of a polypeptide involved in gastric acid
PR  production or secretion.
XX
XX  Example 3; Page 152; 164pp; English.
PS
XX  The present invention provides oligonucleotides, and methods for their
CC  use, which are useful in modulating the action of proteins involved in
CC  gastric acid production. The target protein is preferably the histamine
CC  H2 receptor or one of the proteins which form part of the gastric proton
CC  pump. The sequences and methods of the invention are useful in the
CC  treatment of gastric reflux, gastritis, dyspepsia, stomach ulcers,
CC  duodenal ulcers and other gastric acid disturbances, most of which are
CC  caused by Helicobacter pylori.
XX
SQ  Sequence 23 BP; 1 A; 0 C; 0 G; 22 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.2; DB 1; Length 23;
Best Local Similarity 86.4%; Pred. No. 5e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5395 AAAAAATTCAGAAAAAGAAAAAT 5416
DB 23 AAAAAAAAAAAAAAAAAAAAAAT 2

```

```

PF 22-OCT-1999; 99US-00426548.
XX
XX 22-OCT-1998; 98US-0105180P.
PR
XX (ROBB/) ROBBINS D.
PA (LING/) LIN-GOERKE J L.
XX (LING/) LING J C.
XX
PI Robbins D, Lin-Goerke JL, Ling JC;
DR WPI; 2002-105577/14.
DR
XX New variants of the human MLH1 and MSH2 genes for diagnosing or
PT determining a predisposition for hereditary non-polyposis colorectal
PT cancer.
XX
XX Disclosure, Page 4; 38pp; English.
PS
XX
XX The present invention describes a variant human MLH1 or MSH2 gene. Also
CC described are: (1) a method for diagnosing or predicting susceptibility
CC to hereditary non-polyposis colorectal cancer (HNPCC), comprising
CC screening a DNA sample for the variant MLH1 or MSH2 gene where presence
CC of the variant indicates presence of, or susceptibility to HNPCC; (2) a
CC method of identifying mutants in splice donor or acceptor sites of a
CC human MLH1 gene, comprising sequencing splice donor or acceptor sites of
CC the gene with intronic primers for the human MLH1 gene and analyzing the
CC sequence to identify any mutants; (3) a method of identifying mutants in
CC splice donor or acceptor sites of a human MSH2 gene, comprising
CC sequencing splice donor or acceptor sites of the gene with intronic
CC primers for the human MSH2 gene and analyzing the sequence to identify
CC any mutants; and (4) a transgenic model system for colorectal cancer
CC comprising cells expressing the variant MLH1 or MSH2 gene. The MLH1 and
CC MSH2 variants are used to diagnose or determine a patient's
CC susceptibility to hereditary non-polyposis colorectal cancer. ABL01648 to
CC ABL01745 and ABL01746 to ABL01831 represent MLH1 and MSH2 gene
CC fragments from the present invention. ABL01832 to ABL01839 represent
XX mutagenic primers used in the exemplification of the present invention
SQ
Sequence 23 BP; 21 A; 0 C; 1 G; 1 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.2; DB 1; Length 23;
Best Local Similarity 86.4%; Pred. No. 5e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5392 TAAAAAATTCAGAAAAAGAAA 5413
DB 2 TAAAAAATTCAGAAAAAGAAA 23

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```

RESULT 370
ABL01773
ID ABL01773 standard; DNA; 23 BP.
AC ABL01773;
XX
XX 18-MAR-2002 (first entry)
DT
XX
XX Human MSH2 (hMSH2) intronic sequence SEQ ID NO:126.
DE
XX
XX Human; MLH1; MSH2; hMLH1; hMSH2; variant gene; diagnosis; HNPCC;
KW hereditary non-polyposis colorectal cancer; de.
XX
XX Homo sapiens.
OS
XX US2001044936-A1.
PN
XX 22-NOV-2001.
PD
XX
XX

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RESULT 371
ABL57112/C
ID ABL57112 standard; DNA; 23 BP.
AC ABL57112;
XX
XX 17-SEP-2003 (first entry)
DT
XX
XX Human epithelial cadherine PCR primer 2 (from primer pair A).
DE
XX
XX Human epithelial cadherine; B cadherine; gastric carcinoma; PCR; primer;
KW ss.
XX
XX Homo sapiens.
OS
XX WO2003042409-A2.
PN
XX 22-MAY-2003.
PD
XX
XX 15-NOV-2002; 2002MO-IT000729.
PF
XX 16-NOV-2001; 2001IT-TC001077.
PR
XX (UYUR-) UNIV URBINO.
PA

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XX Magnani M, Graziano F, Ruzzo A;
XX WPI; 2003-449579/42.
DR Identifying greater susceptibility to gastric carcinoma by searching for
PT polymorphisms in the promoter of the E-cadherine gene.
XX Claim 11; Page 12; 17pp; English.
XX This invention relates to a novel method for the diagnosis of greater
CC susceptibility to gastric carcinoma, comprising searching for a possible
CC polymorphism in the promoter of the epithelial cadherine (E-cadherine)
CC gene. The method is useful for identifying a genetic polymorphism that
CC leads to a greater predisposition to the onset of gastric carcinoma. The
CC method is relatively simple, quick, accurate and reliable. The present
CC sequence is that of E-cadherine PCR primer 2 (from primer pair A) used
CC during a method to identify the genotype of an individual for a C to A
CC polymorphism at nucleotide -160 of the E-cadherine gene and claimed in
CC claim 11 of the specification
XX
SQ Sequence 23 BP; 6 A; 7 C; 8 G; 2 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.2; DB 1; Length 23;
Best Local Similarity 86.4%; Pred. No. 5e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 2641 CTGCAGCTGCTGCTGAGCAGC 2662
DB 23 CTGCTGCTGCTGCTGAGGTAC 2
RESULT 372
AAT61390/c
ID AAT61390 standard; cDNA; 24 BP.
XX
AC AAT61390;
XX
DT 23-APR-1997 (first entry)
XX
DE Murine fibrosin 2B3 domain derived primer, B2.
XX
XX Murine; human; fibroblast stimulating factor; FGF-1; fibrosin;
XX lymphokine; heparin binding growth factor; proliferation; primer;
XX collagen synthesis; hyaluronan synthesis; chemottractant; wound healing;
XX wound healing; antibody fibrosis; angiogenesis; inflammation; PCR;
XX liver cirrhosis; primary biliary cirrhosis; glomerulonephritis;
XX renal failure; adult respiratory distress syndrome; cystic fibrosis;
XX asthma; emphysema; pulmonary fibrosis; gastrointestinal fibrosis;
XX Crohn's disease; ulcerative colitis; intestinal occlusion;
XX fibrotic cancer; optic fibrosis; dermal fibrosis; scleroderma;
XX marrow fibrosis; joint fibrosis; vascular fibrosis; ss.
XX
OS Synthetic.
XX
XX WO9626954-A1.
XX
PD 06-SEP-1996.
XX
XX 28-FEB-1996; 96WO-US002727.
XX
XX 28-FEB-1996; 96WO-US002727.
XX
PR 28-FEB-1995; 95US-00395674.
XX
XX (NEW-) NEW ENGLAND MEDICAL CENT HOSPITALS INC.
XX
XX Wylter DJ, Prakash S, Zhang X;
XX
XX WPI; 1996-412735/41.
XX
XX Fibroblast stimulating factor-1 polypeptide - used in treatment of
PT pathological scarring caused by inflammation and for suppression of
PT fibrosis etc.
XX
```

```
PS Example; Page 55; 150pp; English.
XX
XX The sequences given in AAT61390-06 are a probe and primers which were
CC used in the isolation of full length cDNA's encoding murine and human
CC fibroblast stimulating factor (FSF)-1, also known as fibrosin. Fibrosin
CC is a lymphokine which is a heparin binding growth factor. It stimulates
CC fibroblast proliferation, collagen and hyaluronan synthesis and acts as a
CC chemottractant for fibroblasts. The 2B3 domain exhibits comparable
CC activity to full length fibrosin in a cellular proliferation assay.
CC Fibrosin may be used in therapeutic compositions to stimulate wound
CC healing. Antibodies against fibrosin may be used for suppressing
CC fibrosis, the chemotactic movement of fibroblast, angiogenesis and
CC inflammation. These methods may be used in patients which have been
CC diagnosed as having a disease selected from liver cirrhosis, prim.
CC biliary cirrhosis, glomerulonephritis, renal failure, adult respiratory
CC distress syndrome, cystic fibrosis, asthma, emphysema, pulmonary
CC fibrosis, gastrointestinal fibrosis, Crohn's disease, ulcerative colitis,
CC intestinal occlusion, a fibrotic cancer, optic fibrosis, dermal fibrosis,
CC scleroderma, marrow fibrosis, joint fibrosis, and vascular fibrosis
XX
SQ Sequence 24 BP; 2 A; 11 C; 2 G; 9 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.2; DB 1; Length 24;
Best Local Similarity 86.4%; Pred. No. 5e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 568 CTGAAGAGAGAGAGAGCTGAAG 589
DB 22 CTGAGAGAGAGAGAGCTGAAG 1
RESULT 373
AAT61390/c
ID AAT61390 standard; cDNA; 24 BP.
XX
AC AAT61390;
XX
DT 23-APR-1997 (first entry)
XX
DE Murine fibrosin 2B3 domain derived primer, B2.
XX
XX Murine; human; fibroblast stimulating factor; FGF-1; fibrosin;
XX lymphokine; heparin binding growth factor; proliferation; wound healing;
XX collagen synthesis; hyaluronan synthesis; chemottractant; wound healing;
XX antibody fibrosis; angiogenesis; inflammation; hepatic fibrosis;
XX antitumorasis; sarcoidosis; scleroderma; sclerosing cholangitis;
XX rheumatoid arthritis; ulmonary fibrosis; intestinal pneumonitis; ss.
XX
OS Synthetic.
XX
XX WO9626953-A1.
XX
PD 06-SEP-1996.
XX
XX 28-FEB-1996; 96WO-US002726.
XX
XX 28-FEB-1996; 96WO-US002726.
XX
PR 28-FEB-1995; 95US-00395674.
XX
XX (NEW-) NEW ENGLAND MEDICAL CENT HOSPITALS INC.
XX
XX Wylter DJ, Prakash S, Zhang X;
XX
XX WPI; 1996-412734/41.
XX
XX Fibroblast stimulating factor (FSF)-1 polypeptide - used in the detection
PT of propensity for pathological fibrosis, esp. resulting from sarcoidosis,
PT scleroderma, rheumatoid arthritis etc.
XX
XX Example; Page 53; 144pp; English.
XX
XX The sequences given in AAT61397-91 are a probe and primers which were
CC used in the isolation of full length cDNA's encoding murine and human
CC fibroblast stimulating factor (FSF)-1, also known as fibrosin. Fibrosin
```

CC is a lymphokine which is a heparin binding growth factor. It stimulates
 CC fibroblast proliferation, collagen and hyaluronan synthesis and acts as a
 CC chemottractant for fibroblasts. The 283 domain exhibits comparable
 CC activity to full length fibronectin in a cellular proliferation assay.
 CC Fibronectin may be used in therapeutic compositions to stimulate wound
 CC healing. Antibodies against fibronectin may be used for identifying
 CC individuals with a propensity for pathological fibrosis, esp. hepatic
 CC fibrosis. This method may be used on patients who are thought to be
 CC suffering from sclerosomiasis, or where the pathological fibrosis
 CC results from sarcoidosis, scleroderma, sclerosing cholangitis, rheumatoid
 CC arthritis, pulmonary fibrosis or intestinal pneumonitis
 XX
 XX Sequence 24 BP; 2 A; 11 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.2; DB 1; Length 24;
 Best Local Similarity 86.4%; Pred. No. 5e+02; 3; Indels 0; Gaps 0;
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 568 CTGAGAGAGAGAGCTGAAG 589
 Db 22 CTGAGAGAGAGAGACTTAAG 1

RESULT 374
 AAH48246/c
 ID AAH48246 standard; DNA; 24 BP.

AC AAH48246;
 XX 21-SEP-2001 (first entry)

DB Heart muscle cell differentiation related PCR primer SEQ ID NO: 43.

KW Heart muscle cell; human; cell differentiation; heart disease;
 KW PCR primer; ss.

OS Homo sapiens.

XX WO200148151-A1.

XX 05-JUL-2001.

XX 27-DEC-2000; 2000WO-JP009323.

XX 28-DEC-1999; 99JP-00372826.

PR 28-FEB-2000; 2000WO-JP001148.

PR 02-NOV-2000; 2000WO-JP007741.

PA (KYOWA) KYOWA HAKKO KOGYO KK.

XX Umezawa A, Hata J, Fukuda K, Ogawa S, Sakurada K, Gojo S;
 PI Yamada Y;

DR WPI; 2001-425656/45.

PT Cells capable of differentiating into cardiomyocytes and originating in
 PT bone marrow or umbilical blood cells for study of cardiomyocyte
 PT differentiation and treatment of heart disease.

PS Example 2; Page 156; 183pp; Japanese.

CC The present invention provides cells originating in the human bone marrow
 CC or umbilical blood cells which are capable of differentiating into
 CC cardiomyocytes. These cells are useful in the treatment of diseases
 CC involving heart muscle degeneration, such as myocardial infarction, and
 CC the study of cardiomyocyte differentiation. The present sequence is a PCR
 CC primer described in the exemplification of the invention
 XX

XX Sequence 24 BP; 3 A; 7 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.2; DB 1; Length 24;
 Best Local Similarity 86.4%; Pred. No. 5e+02; 3; Indels 0; Gaps 0;
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1185 AAGAGAGAGAGAAATCAG 1206
 Db 22 AAGAGAGAGAGACATCTCAG 1

RESULT 375
 AAH49612/c
 ID AAH49612 standard; DNA; 24 BP.

AC AAH49612;

XX 24-SEP-2001 (first entry)

DB beta-skeletal actin PCR primer #1.

KW PCR primer; angiogenesis; cardiac; cell differentiating agent;
 KW bone marrow; heart muscle cell; heart disease; beta-skeletal actin; ss.

OS Synthetic.

XX WO200148149-A1.

XX 05-JUL-2001.

XX 28-FEB-2000; 2000WO-JP001148.

XX 28-DEC-1999; 99JP-00372826.

PA (KYOWA) KYOWA HAKKO KOGYO KK.

XX Umezawa A, Hata J, Fukuda K, Ogawa S, Sakurada K;
 PI WPI; 2001-418252/44.

DR WPI; 2001-418252/44.

PT New adult bone marrow-originated cells capable of differentiating into
 PT heart muscle cells; applicable as remedies for various heart diseases
 PT particularly with damaged heart muscle accompanying degeneration.

PS Example 1; Page 146; 158pp; Japanese.

CC The present invention relates to cells isolated from bone marrow, which
 CC are capable of at least differentiating into heart muscle cells. The
 CC cells are applicable as remedies for various heart diseases particularly
 CC with damaged heart muscle accompanying degeneration. The present sequence
 CC is a PCR primer, which was used to illustrate the present invention
 XX

XX Sequence 24 BP; 3 A; 7 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.3%; Score 17.2; DB 1; Length 24;
 Best Local Similarity 86.4%; Pred. No. 5e+02; 3; Indels 0; Gaps 0;
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1185 AAGAGAGAGAGAAATCAG 1206
 Db 22 AAGAGAGAGAGACATCTCAG 1

RESULT 376
 AAH44377/c
 ID AAH44377 standard; DNA; 24 BP.

AC AAH44377;

XX 26-SEP-2001 (first entry)

DB Beta-skeletal actin PCR primer SEQ ID NO:43.

KW Differentiation; heart muscle cell; cytokine; transcription factor;
 KW proliferation; surface antigen; heart disease; cardiomyocyte;
 KW bone marrow; umbilical blood cell; heart muscle degeneration;
 KW myocardial infarction; PCR primer; ss.

OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO200148150-A1.
 XX
 PD 05-JUL-2001.
 XX
 PF 02-NOV-2000; 2000WO-JP007741.
 XX
 PR 28-DEC-1999; 99JP-00372826.
 PR 28-FEB-2000; 2000WO-JP001148.
 XX
 PA (KYOW) KYOWA HAKKO KOGYO KK.
 XX
 PI Umezawa A, Hata J, Fukuda K, Ogawa S, Sakurada K, Gojo S;
 PI Yamada Y;
 XX
 DR WPI; 2001-425655/45.
 XX
 PT Cells capable of differentiating into cardiomyocytes and originating in
 PT bone marrow or umbilical blood cells for study of cardiomyocyte
 PT differentiation and treatment of heart disease.
 XX
 PS Example 2; Page 150; 187pp; Japanese.
 XX
 CC The present invention describes cells originating in bone marrow or
 CC umbilical blood cells which are capable of differentiating into
 CC cardiomyocytes. Also described are: (1) cardiomyocytes produced by the
 CC differentiation of the cells; (2) a method for carrying out the
 CC differentiation into cardiomyocytes, regulated by a promotional and/or
 CC inhibitory factor; (3) a method for the differentiation of the cells into
 CC cell types other than cardiomyocytes; (4) drug compositions promoting the
 CC formation of heart muscle and regeneration of heart tissue which contain
 CC the cells; (5) a method for the production of antibodies which recognise
 CC the cells, especially antibodies which recognise a surface antigen on the
 CC cells; (6) a method for screening factors which promote the proliferation
 CC of the cells; (7) a method for immortalising the cells by expressing
 CC telomerase in them; (8) drug compositions for the treatment of heart
 CC disease which contain the immortalised cells; and (9) cell-free
 CC supernatant from the culture of the cells and its use in promoting their
 CC differentiation into cardiomyocytes. The cells are used in the treatment
 CC of diseases involving heart muscle degeneration, such as myocardial
 CC infarction and in the study of cardiomyocyte differentiation. AAH44351 to
 CC AAH44409 and AAB99915 to AAB99935 represent sequences used in the
 CC exemplification of the present invention
 XX
 SQ Sequence 24 BP; 3 A; 7 C; 4 G; 10 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 17.2; DB 1; Length 24;
 Best Local Similarity 86.4%; Pred. No. 5e+02;
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1185 AAGAGAGAGAGAGATCTCAG 1206
 Db 22 AAGAGAGAGAGAGACATCTCAG 1
 XX
 RESULT 377
 ABZ25248/C
 ID ABZ25248 standard; DNA; 24 BP.
 XX
 AC ABZ25248;
 XX
 DT 24-APR-2003 (first entry)
 XX
 DE Human peroxidase 9.90 PCR primer #2.
 XX
 KW Human; peroxidase 9.90; enzyme; cancer; HIV infection; cytostatic;
 KW anti-HIV; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN CN136029-A.

XX
 PD 24-JUL-2002.
 XX
 PF 20-DEC-2000; 2000CN-00135148.
 XX
 PR 20-DEC-2000; 2000CN-00135148.
 XX
 PA (BODE-) BODE GENE DEV CO LTD SHANGHAI.
 XX
 PI Mao Y, Xie Y;
 XX
 DR WPI; 2002-733654/80.
 XX
 PT Polypeptide-human peroxidase protein 9.90 and polynucleotide for coding
 PT it.
 XX
 PS Example 2; Page 16 (Disclosure); 31pp; Chinese.
 XX
 CC The present invention relates to human peroxidase 9.90 (see ABP59112).
 CC The peroxidase is useful for treating diseases such as cancer and HIV
 CC infection. The present sequence is a PCR primer, which was used in an
 CC example from the invention
 XX
 SQ Sequence 24 BP; 7 A; 5 C; 8 G; 4 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 17.2; DB 1; Length 24;
 Best Local Similarity 86.4%; Pred. No. 5e+02;
 Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 3588 CCATGTGCTCAGGCTATCTC 3609
 Db 22 CCATATGCTCAGGCTGATCTC 1
 XX
 RESULT 378
 ABA01048/C
 ID ABA01048 standard; DNA; 24 BP.
 XX
 AC ABA01048;
 XX
 DT 24-JAN-2002 (first entry)
 XX
 DE Human sodium pump subunit 12 PCR primer 1.
 XX
 KW Human; sodium pump; subunit 12; cytostatic; virucide; immunomodulator;
 KW antiinflammatory; haemostatic; gene therapy; cancer; haemopathy;
 KW human immunodeficiency virus; HIV; infection; immunological disease;
 KW inflammatory disorder; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200177162-A1.
 XX
 PD 18-OCT-2001.
 XX
 PF 26-MAR-2001; 2001WO-CN000422.
 XX
 PR 27-MAR-2000; 2000CN-00115156.
 XX
 PA (SHAN-) SHANGHAI BIOWINDOW GENE DEV INC.
 XX
 PI Mao Y, Xie Y;
 XX
 DR WPI; 2002-017442/02.
 XX
 DE Human sodium pump subunit 12 of sodium pump and encoded polynucleotide,
 PT used in diagnosis and treatment of malignant tumors, hemopathy, human
 PT immunodeficiency virus infection, immunological diseases and
 PT inflammation.
 XX
 PS Example 2; Page 16; 35pp; Chinese.
 XX
 CC The invention relates to an isolated polypeptide of human sodium pump

CC subunit 12 comprising a 110 residue amino acid sequence, fully defined in
CC the specification, or its fragment, analogue or derivative. The
CC polypeptide is used in the diagnosis and treatment of malignant tumours,
CC haemopathy, human immunodeficiency virus (HIV) infection, immunological
CC diseases and various inflammatory disorders. The present sequence is a
CC primer used to isolate a polynucleotide encoding the polypeptide of the
CC invention
XX
SQ Sequence 24 BP; 0 A; 0 C; 4 G; 20 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.2; DB 1; Length 24;
Best Local Similarity 86.4%; Pred. No. 5e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAATACAAAAAGAAAA 5414
DB 23 AAAAAAAAAACAAAAAACA 2
RESULT 379
ABN86902/c
ID ABN86902 standard; DNA; 24 BP.
XX
AC ABN86902;
XX
DT 23-JUL-2002 (first entry)
XX
DE Human macroprotein 21.78 PCR primer 2 SEQ ID NO:4.
XX
XX Human; macroprotein 21.78; embryo development teratogenesis; tumour;
XX PCR primer; ss.
XX
XX Homo sapiens.
XX
XX CN1331245-A.
XX
XX 16-JAN-2002.
XX
XX 30-JUN-2000; 2000CN-00116981.
XX
XX 30-JUN-2000; 2000CN-00116981.
XX
XX 30-JUN-2000; 2000CN-00116981.
XX
XX (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX
XX Mao Y, Xie Y;
XX
XX WPI; 2002-292882/34.
XX
XX New polypeptide-human macroprotein 21.78 and polynucleotide encoding it,
XX for treating diseases such as embryo development teratogenesis and tumor.
XX
XX Example 2; Page 19 (Disclosure); 35pp; Chinese.
XX
XX The present invention describes human macroprotein 21.78 (I). Also
XX described is a process for preparing (I) using DNA recombination
XX techniques. (I) and the polynucleotide sequence encoding it (II) can be
XX used in the treatment of diseases such as embryo development
XX teratogenesis and tumours. The present sequence represents a PCR primer
XX for (I), which is used in an example from the present invention
XX
SQ Sequence 24 BP; 0 A; 1 C; 2 G; 21 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.2; DB 1; Length 24;
Best Local Similarity 86.4%; Pred. No. 5e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAATACAAAAAGAAAA 5414
DB 22 AAAAAAAAAACAAAAAACA 1
RESULT 380
ABQ09325/c

ID ABQ09325 standard; DNA; 24 BP.
XX
XX ABQ09325;
XX
XX 11-JUN-2002 (first entry)
XX
XX Oligonucleotide adapter/capture probe 9316.
XX
XX Oligonucleotide array; adapter sequence; probe; ss.
XX
XX Synthetic.
XX
XX WO200216649-A2.
XX
XX 28-FEB-2002.
XX
XX 27-AUG-2001; 2001WO-US026519.
XX
XX 25-AUG-2000; 2000US-0227948P.
XX
XX 29-AUG-2000; 2000US-0228854P.
XX
XX (ILLU-) ILLUMINA INC.
XX
XX Gunderson K;
XX
XX WPI; 2002-292068/33.
XX
XX Array comprising adapter sequences useful for immobilizing or detecting a
XX target nucleic acid sequence, has different addressees comprising
XX different specific capture probes.
XX
XX Claim 1; Page 204; 261pp; English.
XX
XX The invention relates to an oligonucleotide array (I) comprising at least
XX 25 different addressees (adapter sequences) with each comprising a
XX different capture probe selected from a group consisting of the sequences
XX given in ABQ00010-ABQ13409. (I) is useful for immobilising a target
XX CC nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-
XX ABQ13409) to a target nucleic acid to form a modified target nucleic acid
XX CC and contacting the modified target nucleic acid with (I). The steps of
XX CC above method is useful for detecting a target nucleic acid, which further
XX CC comprises detecting the presence of the modified target nucleic acid
XX
SQ Sequence 24 BP; 6 A; 9 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.2; DB 1; Length 24;
Best Local Similarity 86.4%; Pred. No. 5e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 4371 CTTGGATCGAGGATCAGGCTG 4392
DB 23 CTTGGATCGAGGATCAGGCTG 2
RESULT 381
ABQ02710/c
ID ABQ02710 standard; DNA; 24 BP.
XX
XX ABQ02710;
XX
XX 11-JUN-2002 (first entry)
XX
XX Oligonucleotide adapter/capture probe 2701.
XX
XX Oligonucleotide array; adapter sequence; probe; ss.
XX
XX Synthetic.
XX
XX WO200216649-A2.
XX
XX 28-FEB-2002.
XX
XX 27-AUG-2001; 2001WO-US026519.
XX

```
XX 25-AUG-2000; 2000US-0227948P.
PR 29-AUG-2000; 2000US-0228854P.
XX (ILLU-) ILLUMINA INC.
PA Gunderson K;
XX WPI; 2002-292068/33.
XX Array comprising adapter sequences useful for immobilizing or detecting a
PT target nucleic acid sequence, has different addresses comprising
PT different specific capture probes.
XX Claim 1; Page 108; 261pp; English.
XX The invention relates to an oligonucleotide array (1) comprising at least
CC 25 different addresses (adapter sequences) with each comprising a
CC different capture probe selected from a group consisting of the sequences
CC given in ABQ00010-ABQ13409. (1) is useful for immobilizing a target
CC nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-
CC ABQ13409) to a target nucleic acid to form a modified target nucleic acid
CC and contacting the modified target nucleic acid with (1). The steps of
CC above method is useful for detecting a target nucleic acid, which further
CC comprises detecting the presence of the modified target nucleic acid
CC
SQ Sequence 24 BP; 6 A; 9 C; 4 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 17.2; DB 1; Length 24;
Best Local Similarity 86.4%; Pred. No. 5e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 4371 CTTGGATCAGGATCAGGCTG 4392
DB 23 CTTGGATCAGGATCAGGCTG 2
XX
RESULT 382
ABQ09366
ID ABQ09366 standard; DNA; 24 BP.
XX
XX ABQ09366;
AC 11-JUN-2002 (first entry)
XX
XX Oligonucleotide adapter/capture probe 9357.
DE Oligonucleotide adapter; adapter sequence; probe; ss.
XX
XX Oligonucleotide array; adapter sequence; probe; ss.
XX
XX Synthetic.
OS
XX
XX WO200216649-A2.
PN
XX
XX 28-FEB-2002.
PD
XX
XX 27-AUG-2001; 2001WO-US026519.
PF
XX
XX 25-AUG-2000; 2000US-0227948P.
PR 29-AUG-2000; 2000US-0228854P.
XX
XX (ILLU-) ILLUMINA INC.
PA
XX
XX Gunderson K;
PI
XX
XX WPI; 2002-292068/33.
DR
XX
XX Array comprising adapter sequences useful for immobilizing or detecting a
PT target nucleic acid sequence, has different addresses comprising
PT different specific capture probes.
XX
XX Claim 1; Page 204; 261pp; English.
XX
XX The invention relates to an oligonucleotide array (1) comprising at least
```

```
CC 25 different addresses (adapter sequences) with each comprising a
CC different capture probe selected from a group consisting of the sequences
CC given in ABQ00010-ABQ13409. (1) is useful for immobilizing a target
CC nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-
CC ABQ13409) to a target nucleic acid to form a modified target nucleic acid
CC and contacting the modified target nucleic acid with (1). The steps of
CC above method is useful for detecting a target nucleic acid, which further
CC comprises detecting the presence of the modified target nucleic acid
CC
SQ Sequence 24 BP; 5 A; 4 C; 9 G; 6 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 17.2; DB 1; Length 24;
Best Local Similarity 86.4%; Pred. No. 5e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 4371 CTTGGATCAGGATCAGGCTG 4392
DB 2 CTTGGATCAGGATCAGGCTG 23
XX
RESULT 383
AA166361/C
ID AA166361 standard; DNA; 24 BP.
XX
XX AA166361;
AC
XX
XX 23-JAN-2002 (first entry)
DT
XX
XX Human phosphatidylinositol-3 kinase 35 cDNA PCR primer #2.
DE
XX
XX Human; phosphatidylinositol-3 kinase 35; PTDINS-3 kinase 35; Cancer;
KW haemopathy; development disorder; HIV infection; immunological disease;
KW inflammation; gene therapy; PCR primer; ss.
XX
XX Homo sapiens.
OS
XX
XX WO200175014-A2.
PN
XX
XX 11-OCT-2001.
PD
XX
XX 16-MAR-2001; 2001WO-CN000328.
PF
XX
XX 17-MAR-2000; 2000CN-00114973.
PR
XX
XX (BIOW-) BIOWINDOW GENE DEV INC SHANGHAI.
PA
XX
XX Mao Y, Xie Y;
PI
XX
XX WPI; 2002-025836/03.
DR
XX
XX New human phosphatidylinositol-3 (PTDINS3) kinase 35 for diagnosing and
PT treating malignant tumor, hemopathy, human immunodeficiency virus
PT infection, immunological diseases and various inflammations.
PT
XX
XX Example 2; Page 12; 34pp; Chinese.
PS
XX
XX The present invention provides the protein and coding sequences of human
CC phosphatidylinositol-3 (PTDINS-3) kinase 35. The sequences can be used in
CC the treatment of cancer, haemopathy, HIV infection, development
CC disorders, immunological diseases and inflammation. The present sequence
CC is a PCR primer for the coding sequence of the invention
CC
SQ Sequence 24 BP; 3 A; 0 C; 1 G; 20 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 17.2; DB 1; Length 24;
Best Local Similarity 86.4%; Pred. No. 5e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5391 TTTAAAAAATACAAAAAGAAA 5412
DB 22 TTTAAAAAATACAAAAAGAAA 1
```

RESULT 384
ABK43308
ID ABK43308 standard; DNA; 24 BP.
XX
AC ABK43308;
XX
DT 05-JUN-2002 (first entry)
XX
DE Rat KHNK1 degenerate PCR primer #6.
XX
KW HKNG1; ss; chromosome 18p; bipolar affective disorder; BAD; PCR; primer;
KM severe bipolar affective (mood) disorder; BP-1; schizophrenia;
XX Hong Kong new gene 1; antimanic; antidepressant; neuroleptic.
OS
OS Rattus sp.
XX Synthetic.
XX W0200210366-A2.
XX
PD 07-FEB-2002.
XX
PF 02-AUG-2001; 2001MO-US024417.
XX
PR 02-AUG-2000; 2000US-00631275.
XX
PR 28-NOV-2000; 2000US-00722544.
XX
PA (MILL-) MILLENNIUM PHARM INC.
XX (REGC) UNIV CALIFORNIA.
XX
PI Chen H, Freimer NB, Novak T;
XX
XX WPI; 2002-195962/25.
XX
PT New nucleic acid molecule Hong Kong New Gene 1 (HKNG1), useful for
PT screening for molecules which modulate HKNG1 expression for the treatment
PT of bipolar disorder and schizophrenia.
XX
XX Example 19; Page 174; 367bp; English.
XX
XX The invention relates to an isolated nucleic acid molecule comprising a
XX nucleotide sequence that encodes a Hong Kong New Gene (HKNG) 1 gene
XX product. The human gene for HKNG1 is located on chromosome 18p in an area
XX associated with bipolar affective disorder. BAD. Also included are an
XX expression vector comprising the nucleic acid, a host cell expressing the
XX nucleic acid, an anti-HKNG1 antibody, a method of identifying modulators
XX of HKNG1, and identifying an individual (at risk of) having HKNG1-
XX mediated disorder comprising detecting the presence or absence of a
XX polymorphism that correlates with an HKNG1 allele associated with the
XX disorder, where the presence of the polymorphism indicates that the
XX individual (is at risk of) having HKNG1-mediated disorder. A (small
XX molecule) compound which modulates (inhibits or potentiates) expression
XX of a HKNG1 gene or gene product in a human individual is useful for the
XX treatment of a HKNG1-mediated disorder such as bipolar affective disorder
XX (BAD), severe bipolar affective (mood) disorder (BP-1) and schizophrenia.
XX The present sequence is PCR primer which amplifies an HKNG1 sequence
XX
SQ Sequence 24 BP; 8 A; 1 C; 10 G; 4 T; 0 U; 1 Other;
Query Match 0.3%; Score 17.2; DB 1; Length 24;
Best Local Similarity 79.2%; Pred. No. 5e+02;
Matches 19; Conservative 1; Mismatches 4; Indels 0; Gaps 0;
QY 1191 GAGAGCAATCTGAGAAAGCGAG 1214
DB 1 GAGTGTGAAATTGAGAGAGGCGAG 24

RESULT 385
ABK86169
ID ABK86169 standard; DNA; 24 BP.
XX
AC ABK86169;
XX
DT 24-SEP-2002 (first entry)
XX
DE Oligo dt primer #2 used in method to study gene expression.
XX
XX Oligo dt primer; gene expression analysis; primer; ss.
XX
XX Synthetic.
XX
XX W0200236628-A2.
XX
PD 10-MAY-2002.
XX
PF 01-NOV-2001; 2001MO-US045401.
XX
PF 01-NOV-2000; 2000US-0244933P.
XX
PR 01-NOV-2000; 2000US-0244933P.
XX
PA (GENO-) GENOMIC SOLUTIONS INC.
XX
PI Kane MD, Dombkowski AA, Nagel AC;
XX
XX WPI; 2002-508123/54.
XX
DR
XX
XX Identifying and characterizing gene expression in samples, for
PT identifying mRNAs expressed at different levels, comprises employing an
PT identifier having a oligo-dt primer of a specific sequence and a
PT detectable marker at its 5' end.
XX
PS Disclosure; Page 11; 45bp; English.
XX
XX The invention relates to systems for identification and characterisation
XX of gene expression in one or more samples, comprising an identifier having
XX a specific oligo-dt primer sequence, where the identifier comprises a
XX detectable marker at its 5' end. The system is useful for identifying any
XX or all genes expressed in a given in vivo or in vitro RNA sample, as well
XX as the relative differences in mRNA between 2 or more samples, where
XX desired, for supporting discovery of new genes, and for identifying mRNAs
XX that are expressed at different levels between 2 or more samples. The new
XX system or method addresses limitations of prior methods by comprising
XX compositions and systems that incorporate new strategies where molecular
XX or biochemical assay compositions and systems are linked to DNA or RNA
XX sequence databases for optimal resource efficiency in assaying gene
XX expression. The system has the following advantages over existing
XX methods: (a) prior sequence information or clone library construction is
XX not needed to enable the assay; (b) provides immediate sequence
XX information in addition to information concerning changes or differences
XX in mRNA level; (c) generates cDNA fragments from all mRNAs present in the
XX sample for subsequent investigation by common molecular biology
XX techniques; and (d) does not require prior knowledge of the sequence of
XX the genome of the organism under investigation and can be employed in
XX organisms lacking significant genomic sequence information. The present
XX sequence represents an oligo dt primer used in the method of the
XX invention
XX
SQ Sequence 24 BP; 20 A; 0 C; 1 G; 3 T; 0 U; 0 Other;
Query Match 0.3%; Score 17.2; DB 1; Length 24;
Best Local Similarity 86.4%; Pred. No. 5e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5391 TTAATAAAATACCAAAAGAAA 5412
DB 3 TTTAAAAAAAAAAAAAAAAAAAAA 24

DE Oligo dt primer #1 used in method to study gene expression.
XX
KM Oligo dt primer; gene expression analysis; primer; ss.
XX
OS Synthetic.
XX
PN WO200236828-A2.
XX
PD 10-MAY-2002.
XX
PF 01-NOV-2001; 2001WO-US045401.
XX
PR 01-NOV-2000; 2000US-0244933P.
XX
PA (GENO-) GENOMIC SOLUTIONS INC.
XX
PI Kane MD, Dombkowski AA, Nagel AC;
XX
DR WPI; 2002-508123/54.
XX
PT Identifying and characterizing gene expression in samples, for
XX identifying mRNAs expressed at different levels, comprises employing an
PT identifier having a oligo-dt primer of a specific sequence and a
XX detectable marker at its 5' end.
XX
PS Disclosure; Page 11; 45pp; English.
XX
CC The invention relates to systems for identification and characterisation
CC of gene expression in one or more samples, comprising an identifier having
CC a specific oligo-dt primer sequence, where the identifier comprises a
CC detectable marker at its 5' end. The system is useful for identifying any
CC or all genes expressed in a given in vivo or in vitro RNA sample, as well
CC as the relative differences in mRNA between 2 or more samples, where
CC desired, for supporting discovery of new genes, and for identifying mRNAs
CC that are expressed at different levels between 2 or more samples. The new
CC system or method addresses limitations of prior methods by comprising
CC compositions and systems that incorporate new strategies where molecular
CC or biochemical assay compositions and systems are linked to DNA or RNA
CC sequence databases for optimal resource efficiency in assaying gene
CC expression. The system has the following advantages over existing
CC methods: (a) prior sequence information or clone library construction is
CC not needed to enable the assay; (b) provides immediate sequence
CC information in addition to information concerning changes or differences
CC in mRNA level, to determine mRNA expression level and mRNA identification
CC in one assay; (c) generates cDNA fragments from all mRNAs present in the
CC sample for subsequent investigation by common molecular biology
CC techniques; and (d) does not require prior knowledge of the sequence of
CC the genome of the organism under investigation and can be employed in
CC organisms lacking significant genomic sequence in formation. The present
CC sequence represents an oligo dt primer used in the method of the
CC invention
XX
SQ Sequence 24 BP; 3 A; 1 C; 0 G; 20 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 17.2; DB 1; Length 24;
Best Local Similarity 86.4%; Pred. No. 5e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5391 TTTAAAAAATACAAAAAGAA 5412
DB 22 TTTAAAAAATACAAAAAGAA 1
XX
RESULT 387
ADB92755
ID ADB92755 standard; DNA; 24 BP.
XX
AC ADB92755;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human hereditary haemochromatosis SNP H63D probe #14.
XX

KW ss; human; probe; copy number determination; dosage region;
KM risk profiling; chemopredictive testing; disease profiling;
XX pharmacogenetic testing; genetic mutation; genetic disease.
XX
OS Homo sapiens.
XX
PN US2003124547-A1.
XX
PD 03-JUL-2003.
XX
PF 08-MAR-2002; 2002US-00093626.
XX
PR 04-SEP-1998; 98US-00149161.
XX
PR 03-SEP-1999; 99US-00390124.
XX
PA (PEOP/) PEOPLES R.
XX (ATTN/) ATTA R V.
XX
PI Peoples R, Atta RV;
XX
DR WPI; 2003-709175/67.
XX
PT Determination a copy number of a dosage region, useful for disease
XX profiling, comprises hybridizing dosage region to cross linkable probe
PT mixture having dosage reporter probe of cross linking agent, detectable
XX label and sequence.
XX
PS Example 3; Page 15; 22pp; English.
XX
CC The invention relates to a method of determination of a copy number of a
CC dosage region in a sample. The methods are useful for determining the
CC copy number of a dosage region in a sample and genotyping a target
CC sequence, for risk profiling, chemopredictive testing, disease profiling,
CC and pharmacogenetic testing, for determining genetic mutations, genetic
CC diseases, genotyping for trait analysis and genotyping of other
CC polymorphic sequences in humans, plants and animals; for large-scale
CC genomic research and clinical diagnostics. The methods provide accurate
CC gene dosage determinations that are also amenable to large-scale gene
CC dosage investigations and parallel determination of gene dosage and point
CC mutations in a single assay, are capable of detecting a wide variety of
CC mutational mechanisms within a single platform including simple
CC nucleotide substitutions; provide deletions and insertions of one -
CC several base pairs; provide inversions and large deletions and
CC duplications of essentially indefinite size. The methods detect gene
CC dosage abnormalities, either alone or in combination with other genetic
CC polymorphisms. The methods use high-stringency conditions despite a wide
CC range of melting temperature complexes. The present sequence represents a
CC human hereditary haemochromatosis single nucleotide polymorphism probe.
XX
SQ Sequence 24 BP; 10 A; 5 C; 5 G; 3 T; 0 U; 1 Other;
XX
Query Match 0.3%; Score 17.2; DB 1; Length 24;
Best Local Similarity 86.4%; Pred. No. 5e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 2282 GTCCAGATGACCTCAGGAAGCA 2303
DB 1 GACCAATGATCTCAGGAAGCA 22
XX
RESULT 388
ADG17657/C
ID ADG17657 standard; DNA; 24 BP.
XX
AC ADG17657;
XX
DT 26-FEB-2004 (first entry)
XX
DE Mouse toll-like receptor (TLR) 9 RT-PCR primer SeqID19.
XX
KM differentiation; osteoclast precursor cell; Toll-like receptor ligand;
KW TLR ligand; osteopathic; gene therapy; bone loss; bacterial infection;
KW PCR; primer; ss; RT-PCR; reverse transcription PCR; mouse; murine.
XX

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XX OS Mus sp.
XX PN WO2003094857-A2.
XX PD 20-NOV-2003.
XX PF 12-MAY-2003; 2003WO-US014946.
XX PR 10-MAY-2002; 2002US-0379941P.
XX PR 14-APR-2003; 2003US-0462859P.
XX PA (UYPB-) UNIV PENNSYLVANIA.
XX PI Chot Y;
XX DR WPI; 2003-903937/82.
XX PT Inhibiting differentiation of an osteoclast precursor cell, useful for
XX PT treating bone diseases, comprises contacting the cell with a Toll-like
XX PT receptor (TLR) ligand that stimulates a TLR on the osteoclast precursor
XX PT cell.
XX PS Example; SEQ ID NO 19; 72bp; English.
XX CC This invention relates to a novel method of inhibiting differentiation of
XX CC an osteoclast precursor cell comprising contacting the cell with at least
XX CC one Toll-like receptor (TLR) ligand, where the TLR ligand stimulates at
XX CC least one TLR on the osteoclast precursor cell, thus, inhibiting
XX CC differentiation of the osteoclast precursor cell. The invention may be
XX CC useful for the development of compounds with an osteopathic activity or
XX CC for gene therapy. The composition and methods are useful in inhibiting
XX CC differentiation of an osteoclast precursor cell which may be used in the
XX CC development of therapies to treat patients suffering from bone loss
XX CC associated with bacterial infection and bone loss resulting from other
XX CC diseases. These may also be used in identifying a Toll-like receptor that
XX CC inhibits differentiation of an osteoclast precursor cell. The present
XX CC sequence is that of a mouse toll-like receptor (TLR) RT-PCR primer which
XX CC was used in the exemplification of the invention.
XX SQ Sequence 24 BP; 6 A; 7 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 17.2; DB 1; Length 24;
XX Best Local Similarity 86.4%; Pred. No. 5e+02;
XX Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 3127 GAGCTGAGCTGAGCTTCATG 3148
XX DB ||||| ||||| ||||| |||||
XX 24 GAGCTGAGCTGAGCTTCATG 3
XX
XX RESULT 389
XX ADG75923/c
XX ID ADG75923 standard; DNA; 24 BP.
XX AC ADG75923;
XX XX
XX DT 11-MAR-2004 (first entry)
XX XX
XX DE Immunostimulatory non-Cpg oligonucleotide IMT 178 Segid 25.
XX XX
XX KM ss; non-Cpg; immunostimulatory; non-palindromic; immune response;
XX KM proliferation; differentiation; cytokine; antibody production; B-cell;
XX KM plasmacytoid dendritic cell; immunomodulator; gene therapy;
XX KM chronic myelogenous leukemia; melanoma; Kaposi's sarcoma;
XX KM renal cell carcinoma.
XX OS Synthetic.
XX XX
XX PN WO2003101375-A2.
XX PD 11-DEC-2003.
XX

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XX PF 30-MAY-2003; 2003WO-EP005691.
XX PR 30-MAY-2002; 2002CA-02388049.
XX PA (IMMO-) IMMUNOTECH SA.
XX PI Lopez RA;
XX DR WPI; 2004-053333/05.
XX XX
XX PT New immunostimulatory oligonucleotide comprising non-palindromic nucleic
XX PT acid sequence motif, useful for inducing B-cell activation, treating,
XX PT preventing or ameliorating immune system disorder or tumoral disease e.g.
XX PT melanoma.
XX PS Claim 14; SEQ ID NO 25; 139bp; English.
XX XX
XX CC This invention relates to novel immunostimulatory oligonucleotides that
XX CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
XX CC oligonucleotides (without a Cpg motif), which can stimulate an immune
XX CC response in animals of the order of primate, including humans. The immune
XX CC response is characterized by the proliferation, differentiation, cytokine
XX CC and antibody production in B-cells, as well as cell differentiation and
XX CC cytokine production in plasmacytoid dendritic cells. The present
XX CC invention describes immunomodulator compositions that also comprise an
XX CC antigen selected from, for example, viruses, bacteria, parasites, tumour
XX CC cells and glycolipids. As such, these DNA oligos can be used in gene
XX CC therapy for inducing B-cell activation, treating, preventing or
XX CC ameliorating an immune system disorder or a tumoral disease including
XX CC chronic myelogenous leukemia, melanoma, Kaposi's sarcoma, and renal cell
XX CC carcinoma. This oligonucleotide sequence is an immunostimulatory non-Cpg
XX CC variant DNA oligo, used in an exemplification of the invention.
XX SQ Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 17.2; DB 1; Length 24;
XX Best Local Similarity 86.4%; Pred. No. 5e+02;
XX Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 5404 AAAAAAGAAAAATGAAATATA 5425
XX DB ||||| ||||| ||||| |||||
XX 24 AAAAAACAAATGAAAAAATA 3
XX
XX RESULT 390
XX ADO81078
XX ID ADO81078 standard; DNA; 24 BP.
XX AC ADO81078;
XX XX
XX DT 29-JUL-2004 (first entry)
XX XX
XX DE Cow prion protein microsatellite locus primer #90.
XX XX
XX KM gene typing; polymorphic microsatellite loci; PMU;
XX KM disease predisposition; microsatellite marker; prion disease;
XX KM cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
XX KM milk protein; hormone; transcription factor; pT7-blue-vector; cow;
XX KM microsatellite; PCR; primer; ss.
XX OS Bos taurus.
XX XX
XX PN DE10236711-A1.
XX PD 26-FEB-2004.
XX PF 09-AUG-2002; 2002DE-01036711.
XX PR 09-AUG-2002; 2002DE-01036711.
XX XX
XX PA (UYHO-) UNIV HOHENHEIM.
XX XX
XX PI Geldermann H, Preuss S, Han Y;
XX

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XX DR WPI; 2004-215730/21.
XX PT Typing genes that constrain polymorphic microsatellite loci, useful for
XX PT identifying predispotion to disease, by amplification and determining
XX PT length of amplicons.
XX PS Example 3; Page 29; 64pp; German.
XX CC The invention describes a method of typing (M1) a gene (I) that has one
XX CC or more polymorphic microsatellite loci (PMU). The method comprises: PCR
XX CC amplification of at least one DNA region of (I) that includes PMU, using
XX CC as template a DNA sample containing at least one segment of (I); and
XX CC determining the length of the resulting amplicon(s). Also described are:
XX CC a method of determining (M2) microsatellite markers (MM) for
XX CC predispotion to a disease, associated with a gene that includes one or
XX CC more PMU; and prediagnosis (M3) of diseases associated with genes that
XX CC include PMU. The method is used to identify microsatellite markers, in a
XX CC disease-related gene, that are associated with a predispotion to
XX CC diseases and for prediagnosis of such diseases, especially prion diseases
XX CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
XX CC metabolic diseases; also to type genes that encode milk proteins,
XX CC hormones or transcription factors. The method is simpler, quicker and
XX CC particularly less expensive than known methods based on sequencing. This
XX CC sequence represents a primer used to genotype a region of the cow prion
XX CC protein (PrP) comprising a polymorphic microsatellite locus.
XX SQ Sequence 24 BP; 20 A; 4 C; 0 G; 0 T; 0 U; 0 Other;

Query Match          0.3%; Score 17.2; DB 1; Length 24;
Best Local Similarity 86.4%; Pred. No. 5e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy      5393 AAAAAAAAAACAAAAA 5414
Db      1 AAAAAAAAAACAAAAA 22

RESULT 391
AAT12442/c
ID AAT12442 standard; DNA; 17 BP.
AC AAT12442;
XX
XX 17-SEP-1996 (first entry)
XX
XX Antiviral phosphorothioate oligonucleotide #25.
XX DE
XX Antiviral; phosphorothioate; mRNA 4; herpes simplex virus 1; HSV;
XX KW viral infection; HIV; varicella zoster virus; VZV; therapy; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX FT modified_base 1..17
XX FT /tag= a
XX FT /note= "phosphorothioate oligonucleotides"
XX
XX PN MO9603500-A1.
XX
XX PD 08-FEB-1996.
XX
XX PF 25-JUL-1995; 95WO-JP001472.
XX
XX PR 26-JUL-1994; 94JP-00173862.
XX PR 01-NOV-1994; 94JP-00268603.
XX
XX (LITL-) LIT INST CO LTD.
XX PA (KAKE ) KAKEN PHARM CO LTD.
XX
XX PI Shoji Y, Shimada J, Mizushima Y, Iwatani W, Tamura N;
XX DR WPI; 1996-117045/12.

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XX XX Antiviral phosphorothioate oligonucleotide(s) - active against e.g.
XX PT herpes simplex virus 1, HIV and varicella zoster virus.
XX PS Claim 6; Page 150; 163pp; Japanese.
XX CC AAT12435-T12454 represent phosphorothioate oligonucleotides with
XX CC antiviral activity. These sequences, and the phosphorothioate
XX CC oligonucleotides represented by AAT12418-T12434 (which are complementary
XX CC to regions of the mRNA 4 or 5 of herpes simplex virus 1 (HSV)), are
XX CC effective in the prevention and treatment of viral infection. The
XX CC sequences are especially effective against infection by HSV, HIV or
XX CC varicella zoster virus (VZV)
XX SQ Sequence 17 BP; 3 A; 0 C; 12 G; 2 T; 0 U; 0 Other;

Query Match          0.3%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 5.1e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      228 CCTCACCTCACCTC 244
Db      17 CCTCACCTCACCTC 1

RESULT 392
AAF05470/c
ID AAF05470 standard; DNA; 17 BP.
AC AAF05470;
XX
XX 16-FEB-2001 (first entry)
XX
XX Hammerhead ribozyme substrate #2689.
XX DE
XX Ribozyme; erythropoietin; granulocyte colony stimulating factor;
XX KW interferon alpha; ss.
XX
XX Homo sapiens.
XX
XX PN MO200061729-A2.
XX
XX PD 19-OCT-2000.
XX
XX PF 11-APR-2000; 2000WO-US009721.
XX
XX PR 12-APR-1999; 99US-0129390P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX PA
XX Blatt J, Zwick M, Pavco P, Mcswigen J;
XX PI
XX WPI; 2000-647423/62.
XX
XX DR
XX PT Enzymatic and antisense nucleic acid inhibition of repressor genes,
XX PT useful for producing e.g. granulocyte colony stimulating factor protein,
XX PT interferon alpha and erythropoietin.
XX
XX PS Claim 18; Page 117; 164pp; English.
XX
XX CC The present invention relates to enzymatic and antisense nucleic acid
XX CC molecules that act as inhibitors of the expression of repressor genes
XX CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
XX CC factor gene, IRF-2 and/or the CAAAT Displacement Protein (CDP).
XX CC Inhibition of the repressor removes prevents inhibition (and
XX CC consequently increases expression of) genes involved in the production of
XX CC erythropoietin, granulocyte colony stimulating factor protein and
XX CC interferon alpha
XX SQ Sequence 17 BP; 2 A; 2 C; 0 G; 13 T; 0 U; 0 Other;

Query Match          0.3%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 5.1e+02;

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XX JP2001327289-A.
PN
XX
XX 27-NOV-2001.
PD
XX
XX 19-MAY-2000; 2000JP-00148843.
PF
XX
XX 19-MAY-2000; 2000JP-00148843.
PR
XX
XX (RIKA) RIKAGAKU KENKYUSHO.
PA
XX
XX WPI; 2002-127068/17.
DR
XX
XX Membrane bound type netrin.
PT
XX
PS Claim 12; Page 8; 41pp; Japanese.
XX
XX The present invention describes a membrane bound type netrin having a
CC hydrophobic region which can be combined to the cell membrane through
CC glycosylphosphatidylinositol (GPI) at its C-terminal. Also described are:
CC (1) a polynucleotide encoding a membrane bound type netrin; (2) an
CC expression vector containing the polynucleotide or its fragment; (3) a
CC host cell transfected by the expression vector; and (4) a primer used for
CC the amplification of a membrane bound type netrin. The primer can be used
CC in the treatment and diagnosis of diseases requiring increased expression
CC of netrin B1 protein. The present sequence represents a specifically
CC claimed PCR primer for a mouse membrane bound type netrin from the
CC present invention
CC
SQ Sequence 20 BP; 4 A; 5 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 0.3%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.2e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1061 CAGCACTGCTGGGAGC 1077
DB 3 CAGCACTGCTGGGAGC 19

RESULT 396
ADC98464/C
ID ADC98464 standard; DNA; 20 BP.
XX
XX ADC98464;
AC
XX
XX 01-JAN-2004 (first entry)
DT
XX
XX NFK202 polymorphism marker PCR primer B primer seq.
DE
XX
XX low bone mineral density; BMD; bone damage; polymorphism; osteoporosis;
KM single nucleotide polymorphism; SNP; PCR primer; ss; human.
XX
XX Synthetic.
OS
XX Homo sapiens.
OS
XX WO2003054218-A2.
PN
XX
XX 03-JUL-2003.
PD
XX
XX 19-DEC-2002; 2002WO-US040948.
PF
XX
XX 20-DEC-2001; 2001US-0342711P.
PR
XX 04-NOV-2002; 2002US-0423559P.
XX
XX (INCY-) INCYTE GENOMICS INC.
PA
XX
XX Jones KA, Valdes A, Townley DJ, Mangion J, Galwey N, Bennett S;
PI McKay I, Schaffer A;
XX
XX WPI; 2003-559156/52.
DR
XX
XX Determining whether an individual is predisposed to susceptibility to low
PT

PT bone mineral density (BMD) and/or bone damage, involves identifying
PT polymorphisms in associated genes.
XX
XX
XX Example 8; Page 238; 246pp; English.
PS
XX
XX The present invention describes a method of determining whether an
CC individual is predisposed to susceptibility to low bone mineral density
CC (BMD) and/or bone damage comprising identifying whether the individual
CC has at least one polymorphism in a polynucleotide encoding a protein,
CC where the polynucleotide is one of 81 200-500 nucleotide sequences (S1,
CC see ADC98235 to ADC98315). An agent identified in an method from the
CC present invention which can be used for the prevention or treatment of a
CC disease resulting in susceptibility to low BMD and/or bone damage is
CC useful in the manufacture of a medicament for use in modulating the
CC susceptibility to low BMD and/or bone damage. The disease associated with
CC low BMD and/or bone damage is osteoporosis. The present PCR primer
CC sequence is used in the exemplification of the present invention.
CC
SQ Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.3%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.2e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1903 ACAGCTCTGCAGAACT 1919
DB 17 ACAGCTCTGCAGAACT 1

RESULT 397
AB287226/C
ID AB287226 standard; DNA; 20 BP.
XX
XX AB287226;
AC
XX
XX 17-OCT-2003 (first entry)
DT
XX
XX Human oligonucleotide sequence.
DE
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KM antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KM antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KM antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KM lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
OS
XX
XX WO200285308-A2.
PN
XX
XX 31-OCT-2002.
PD
XX
XX 23-APR-2002; 2002WO-US013135.
PF
XX
XX 24-APR-2001; 2001US-0286137P.
PR
XX
XX (EPITG-) EPIGENESIS PHARM INC.
PA
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.
DR
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Claim 15; SEQ ID NO 2468; 872pp; English.
PS
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC anti-inflammatory steroid and ubiquinone. A composition of the invention
CC has anti-inflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in anti-sense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC anti-inflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
CC
SQ Sequence 20 BP; 0 A; 8 C; 0 G; 12 T; 0 U; 0 Other;
CC
Query Match 0.3%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred.No. 5.2e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1180 AGAGAAAGAGAGAGAGA 1196
Db 17 AGAGAAAGAGAGAGAGA 1
CC
RESULT 398
ABD23456/c
ID ABD23456 standard; DNA; 20 BP.
AC ABD23456;
XX
XX 29-JUL-2004 (first entry)
DT
XX
XX Human myosin X-derived oligonucleotide SEQ ID 2468.
DE
XX
XX Human; antitense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; antiallergic; anti-inflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIC-) EPIGENESIS PHARM INC.
XX
XX NYCE JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S,
XX WPI, 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antitense
XX oligonucleotide containing less percentage of adenosine, targeted to
XX nucleic acids associated with lung airway or lung dysfunction, and
XX bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 2468; 763bp; English.
XX
XX This invention describes a novel composition (a) a first active agent,

CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity; levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
CC
SQ Sequence 20 BP; 0 A; 8 C; 0 G; 12 T; 0 U; 0 Other;
CC
Query Match 0.3%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred.No. 5.2e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1180 AGAGAAAGAGAGAGAGA 1196
Db 17 AGAGAAAGAGAGAGAGA 1
CC
RESULT 399
ABX03804
ID ABX03804 standard; cDNA; 21 BP.
AC ABX03804;
XX
XX 09-JAN-2003 (first entry)
DT
XX
XX DNA encoding secreted protein signal peptide sequence #13.
DE
XX
XX Differential display method; leucine-rich motif; transmembrane protein;
XX secreted protein; secreted protein signal peptide; ss.
XX
XX Unidentified.
XX
XX WO200259259-A2.
XX
XX 01-AUG-2002.
XX
XX 23-JAN-2002; 2002WO-IL000071.
XX
XX 23-JAN-2001; 2001US-0263158P.
XX
XX (UTRA-) UNITV RAMOT APPLIED RES & IND DEV LTD.
XX
XX Wreschner DH;
XX
XX WPI, 2002-589769/64.
XX
XX P-PDB; ABG98333.
XX
XX Differential display method for identifying secreted or transmembrane
XX protein, comprises contacting a DNA with a first primer that hybridizes

PT to a sequence coding for a leucine-rich motif and with a second
PT oligonucleotide primer.
PS Disclosure; Fig 2; 37pp; English.
XX
CC The invention relates to a differential display comprising contacting
CC cDNA with a first primer that hybridises to an oligonucleotide sequence
CC coding for a leucine-rich motif, and with a second oligonucleotide primer
CC to form a cDNA-hybrid molecule. The method comprises obtaining mRNA from
CC at least 2 samples, synthesising cDNA from the RNA of each sample,
CC contacting the cDNA with a first primer that hybridises to an
CC oligonucleotide sequence coding for a leucine-rich motif, and with a second
CC oligonucleotide primer to form cDNA-hybrid molecules, amplifying the cDNA
CC hybrid molecules, detecting amplified products and comparing the
CC amplified products from each sample to identify distinctive amplified
CC products coding for at least one secreted or transmembrane protein. The
CC method is useful for discovering novel secreted and/or transmembrane
CC proteins which are important for cell processes and play an important
CC role in determining its phenotype, and which act as mediators for the
CC transfer of signals from external environment into the cell itself, thus
CC modulating gene expression. Sequences ABX03792-ABX03869 represent DNA
CC encoding secreted protein signal peptide sequences
CC
SQ Sequence 21 BP; 1 A; 7 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 5.3e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2639 CCCTGCAGCTGCTGCTG 2655
DB 2 CCCTGCAGCTGCTGCTG 18

RESULT 400
AAV85582
ID AAV85582 standard; DNA; 20 BP.
XX
AC AAV85582;
XX
XX 10-FEB-1999 (first entry)
DT
XX
XX LRP5 PCR primer Gp1 1P.
DE
XX
XX LRP5; LDL-receptor related protein; LRP-3; IDDM; diagnosis; endocytosis;
KM insulin dependent diabetes mellitus; autoimmune disease;
KM glomerulonephritis; inflammation; viral infection; osteoporosis;
KM hypercholesterolemia; Alzheimer's disease; low density lipoprotein;
KM PCR primer; ss.
XX
XX
XX Synthetic.
OS
XX Homo sapiens.
OS
XX MO9846743-A1.
PN
XX 22-OCT-1998.
PD
XX
XX 15-APR-1998; 98MO-GB001102.
PF
XX
XX 15-APR-1997; 97US-0043553P.
PR
XX 05-JUN-1997; 97US-0048740P.
PR
XX (WELL) WELLCOME TRUST LTD.
PA (MERI) MERCK & CO INC.
XX
XX
PI Todd JA, Hesse JM, Caskey CT, Cox RD, Gerhold D, Hammond H;
PI Hey F, Kawaguchi Y, Merriman TR, Metzker ML, Nakagawa Y;
PI Phillips MS, Twells RCJ;
XX
XX WPI; 1998-594573/50.
XX
PT New isolated LDL-receptor related protein - used to develop products for
PT treating, e.g. elevated triglyceride levels, diabetes, autoimmune

PT disorders, inflammation or Alzheimer's disease.
XX
XX Claim 12; Page 98; 200pp; English.
PS
XX
CC The present invention describes LRP5 (low density lipoprotein (LDL)
CC receptor related protein, previously designated LRP-3). AAV85552 to
CC AAV85586 represent PCR primer used for obtaining LRP5 cDNA. Nucleic acid
CC molecules (NMs) encoding LRP5 can be used for determining if an
CC individual is susceptible to insulin dependent diabetes mellitus (IDDM).
CC The NMs or proteins can be used for reducing triglyceride levels in the
CC serum of an individual. Therapies that affect LRP5 may also be useful in
CC the treatment of autoimmune diseases such as glomerulonephritis, diseases
CC and disorders involving disruption of endocytosis and/or antigen
CC presentation, cytokine clearance and/or inflammation, viral infection,
CC pathogenic bacterial toxin contamination, elevation of free fatty acids
CC or hypercholesterolemia, type 2 diabetes, osteoporosis, Alzheimer's
CC disease and cardiovascular disease. Products from the present invention
CC can also be used for detection, diagnosis and drug screening
CC
SQ Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 5.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3599 AGGCTAATCTCAACTCTG 3618
DB 1 AGGCTGATCTCAACTCTG 20

RESULT 401
AAF23284/C
ID AAF23284 standard; DNA; 20 BP.
XX
XX
XX AAF23284;
AC
XX
XX 19-MAR-2001 (first entry)
DT
XX
XX Oligonucleotide for detection of Mycobacterium smegmatis.
DE
XX
XX ITS; internal transcribed spacer region; Mycobacterium fortuitum;
KM Mycobacterium chelonae; Mycobacterium abscessus; Mycobacterium vaccae;
KM Mycobacterium flavescens; Mycobacterium asiaticum; tuberculosis;
KM Mycobacterium porcinum; Mycobacterium acapulcensis; identification;
KM Mycobacterium thermofert; PCR primer; probe; detection; ss.
XX
XX
XX Mycobacterium smegmatis.
OS
XX
XX WO200073436-A1.
PN
XX
XX 07-DEC-2000.
PD
XX
XX 16-MAY-2000; 2000MO-KR000477.
PF
XX
XX 29-MAY-1999; 99KR-00019631.
PR
XX 29-MAY-1999; 99KR-00019632.
PR
XX 29-MAY-1999; 99KR-00019633.
PR
XX 29-MAY-1999; 99KR-00019634.
PR
XX 07-APR-2000; 2000KR-00018189.
PR
XX (SUHI-) SJ HIGHTECH CO LTD.
PA (KIMC/) KIM C M.
PA (PARK/) PARK H K.
XX
XX
PI Kim CM, Park HK, Jang HJ;
PI
XX
XX WPI; 2001-061527/07.
XX
PT Novel oligonucleotide sequences of internal transcribing spacer region of
PT non-tuberculosis mycobacteria (NTM) used as probes or primers for
PT detecting and identifying mycobacteria and distinguish TB complex from
PT NTM.

XX Claim 29; Page 68; 89pp; English.

PS

CC The present sequence is an oligonucleotide developed using a

CC Mycobacterium ITS (internal transcribed spacer region) nucleotide

CC sequence. ITS DNA sequences from *M. fortuitum*, *M. chelonae*, *M. abscessus*,

CC *M. vaccae*, *M. flavescens*, *M. asiaticum*, *M. porcinum*, *M. acapulcensis*, *M.*

CC *dermofortis* genes were identified. The oligonucleotides derived from

CC these sequences were used to develop PCR primers and hybridisation probes

CC for detection and identification of *Mycobacterium*. ITS has a more

CC polymorphic region than 16S rRNA and also has a conserved region. It is

CC therefore highly effective as a target DNA for distinction of genotype.

CC The oligonucleotide probes, attached to solid substrate, hybridise only

CC with nucleotide sequences in ITS of specific mycobacteria, and thus they

CC can detect and identify the specific mycobacteria sensitively. The

CC oligonucleotides can also detect and identify the specific mycobacteria

CC by PCR amplification. Using the oligonucleotide primers or probes made

CC from ITS of mycobacteria, it is possible to detect mycobacteria,

CC distinguish tuberculosis (TB) complex from non-tuberculosis mycobacteria

CC (NTM), and to identify mycobacteria species accurately and effectively

XX

Sequence 20 BP; 5 A; 2 C; 10 G; 3 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.8; DB 1; Length 20;

Best Local Similarity 90.0%; Pred. No. 5.6e+02;

Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 193 CGTTGCCACACCCCATCTC 212

DB 20 CGTTCCACACCCCATCTC 1

RESULT 402

AA75041

ID AAF75041 standard; DNA; 20 BP.

AC AAF75041;

XX

XX 08-MAY-2001 (first entry)

DT

DE Primer #13.

DS

XX 5-hydroxy tryptamine receptor 1A; HTR1A; polymorphism; Tourette's;

KM neuropsychiatric; ss.

XX

OS Homo sapiens.

XX

XX WO200110884-A1.

PN

XX

PD 15-FEB-2001.

XX

PF 01-AUG-2000; 2000WO-US040519.

XX

PR 06-AUG-1999; 99US-0147711P.

XX

PA (GENA-) GENAISSANCE PHARM INC.

XX

PI Denton RR, Kilem SE, Nandabalan K, Stephens JC;

XX

DR WPI; 2001-191514/19.

XX

XX

PT New 5-hydroxy tryptamine receptor 1A gene variants for studying

PT expression and biological function of the gene and for developing drugs

PT targeting 5-hydroxy tryptamine receptor 1A protein.

XX

XX

PS Example 1; Page 33; 64pp; English.

XX

CC The present invention relates to 5-hydroxy tryptamine receptor 1A (HTR1A)

CC gene. HTR1A-encoding polynucleotides containing one or more of the novel

CC polymorphic sites are useful in studying the expression and biological

CC function of HTR1A, as well as in developing drugs targeting this protein.

CC In addition, information on the combinations of polymorphisms in the

CC HTR1A gene may have diagnostic and forensic applications. A polymorphic

CC variant of HTR1A is useful in studying the effect of the variation on the

CC biological activity of HTR1A as well as studying the binding affinity of

CC candidate drugs targeting HTR1A for the treatment of neuropsychiatric

CC diseases and Tourette's syndrome

XX

Sequence 20 BP; 7 A; 0 C; 13 G; 0 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.8; DB 1; Length 20;

Best Local Similarity 90.0%; Pred. No. 5.6e+02;

Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2563 GAGCGGAGAGAGAGATGCA 2582

DB 1 GAGCGGAGAGAGAGAGGCA 20

RESULT 403

AA12399/c

ID AAD12399 standard; DNA; 20 BP.

XX

AC AAD12399;

XX

XX 25-SEP-2001 (first entry)

DT

DE Human caspase 8 mRNA antisense compound ISIS 107677.

XX

XX Caspase 8; infection; inflammation; tumour; research reagent; cytostatic;

KM gene therapy; antisense; human; phosphorothioate; ss.

XX

OS Homo sapiens.

XX

XX Synthetic.

XX

XX

XX Key

FT modified_base 1..20

FT /tag= a

FT /mod_base= OTHER

FT /note= "Phosphorothioate backbone"

FT 1..5

FT /tag= b

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

FT 2

FT /tag= d

FT /mod_base= m5c

FT 4

FT /tag= e

FT /mod_base= m5c

FT 6

FT /tag= f

FT /mod_base= m5c

FT 10

FT /tag= g

FT /mod_base= m5c

FT 12

FT /tag= h

FT /mod_base= m5c

FT 16..20

FT /tag= c

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

FT 16

FT /tag= i

FT /mod_base= m5c

XX

XX US6258600-B1.

XX

XX 10-JUL-2001.

XX

XX 19-JAN-2000; 2000US-00487445.

XX

XX 19-JAN-2000; 2000US-00487445.

XX

PA (ISIS-) ISIS PHARM INC.

XX Zhang H, Cowbert LM;
PI WPI; 2001-432165/46.
XX
XX New antisense compounds capable of modulating expression of caspase 8 for
PT the diagnoses, prophylaxis and treatment of diseases associated with
PT expression of caspase 8, e.g. inflammation and tumor formation.
XX
XX Example 15; Col 43-44; 56pp; English.
XX
XX The invention relates to antisense compounds which inhibit the expression
CC of human caspase 8. The antisense compound is useful for diagnosing and
CC treating diseases associated with the expression of caspase 8 and for
CC prophylaxis e.g. to prevent or delay infection, inflammation or tumour
CC formation, and as a research reagent. The present sequence is an
CC antisense compound targeted to human caspase 8 mRNA
XX
XX Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 5.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 3175 CTTTGCAGAGACTGAGACA 3194
DB 20 CTTTGCAGAGCCTGAGAGA 1
RESULT 404
ABN86953
ID ABN86953 standard; DNA; 20 BP.
XX
XX AC ABN86953;
XX
XX 29-JUL-2002 (first entry)
XX
XX Human NOV7 forward PCR primer SEQ ID NO:72.
XX
XX Human: NOVX; cytosolic; antiarteriosclerotic; cardiovascular; lymphoma;
KM anti-diabetic; immunosuppressive; neuroprotective; gene therapy; cancer;
KM cardiomyopathy; atherosclerosis; cell signal processing; diabetes; AIDS;
KM metabolic pathway modulation; neoplastic; neurological disorder; asthma;
KM adenocarcinoma; prostate cancer; uterine cancer; immune response;
KM Crohn's disease; multiple sclerosis; Graft versus host disease;
KM PCR primer; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO200230974-A2.
XX
XX PD 18-APR-2002.
XX
XX PF 12-OCT-2001; 2001WO-US031922.
XX
XX 12-OCT-2000; 2000US-0240113P.
PR 16-OCT-2000; 2000US-0240625P.
PR 16-OCT-2000; 2000US-0240637P.
PR 16-OCT-2000; 2000US-0240648P.
PR 16-OCT-2000; 2000US-0240662P.
PR 16-OCT-2000; 2000US-0240669P.
PR 16-OCT-2000; 2000US-0240703P.
PR 16-OCT-2000; 2000US-0240732P.
PR 16-OCT-2000; 2000US-0241190P.
PR 18-JAN-2001; 2001US-0262455P.
XX
XX (CURA-) CURAGEN CORP.
PA (MILL/) MILLET I.
XX
XX Grosse WM, Alsbrook JP, Lepley DM, Burgess CE, Mishra V;
PI Kekuda R, Li L, Padigara M, Shinkets RA, Zernusen BD, Spytek KA,
PI Binger S, Gerlach V, Macdougall J, Stone D, Gunther E, Ellerman K;
XX

DR WPI; 2002-444172/47.
XX
XX New NOVX polypeptides and polynucleotides, useful for treating or
PT preventing a NOVX-associated disorder or a pathological state in a
PT subject, particularly a human, e.g. cardiomyopathy, atherosclerosis,
PT cancer or diabetes.
XX
XX Example 2; Page 205; 227pp; English.
XX
XX The present invention describes novel human proteins designated NOVX
CC (where X is 1, 2a, 2b, 2c, 2d, 3, 4, 5, 6a, 6b, 7, 8, or 9). NOVX is a
CC tyrosine-protein kinase 6-like protein; NOV2a-d are keratin 4-like
CC proteins; NOV3 is a collagen-like protein; NOV4 is a cystatin B-like
CC protein; NOV5 is a serotonin receptor-like protein; NOV6a and NOV65v are
CC cold inducible glycoprotein 30-like proteins; NOV7 is a matrilin-2-like
CC protein; NOV8 is a leukocyte surface antigen (CD53)-like protein; and
CC NOV9 is a tyrosine kinase-like protein. NOVX sequences have cytosolic,
CC antiarteriosclerotic, cardiovascular, anti-diabetic, immunosuppressive and
CC neuroprotective activities, and can be used in gene therapy. The NOVX
CC sequences can be used in therapeutics, particularly for treating,
CC preventing or alleviating a NOVX-associated disorder or a pathological
CC state in a subject, particularly a human. These disorders include
CC cardiomyopathy, atherosclerosis, a disorder related to cell signal
CC processing and metabolic pathway modulation or diabetes. The NOVX
CC sequences are also useful for determining the presence of or
CC predisposition to a disease associated with altered levels of NOVX
CC polypeptide or nucleic acid, particularly cancer. The NOVX sequences are
CC especially useful in therapeutic or prophylactic applications for
CC neoplastic or neurological disorders, and in the treatment of
CC adenocarcinoma, lymphoma, prostate cancer, uterine cancer, immune
CC response, AIDS, asthma, Crohn's disease, multiple sclerosis or Graft
CC versus host disease. The present sequence represents a PCR primer for
CC human NOV7, which is used in an example from the present invention
XX
SQ Sequence 20 BP; 7 A; 1 C; 10 G; 2 T; 0 U; 0 Other;
Query Match 0.3%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 5.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 574 AAGGAGAGCTGAGAGATT 593
DB 1 AAGGAGAGAGCTGAGAGATT 20
RESULT 405
ABZ25473/C
ID ABZ25473 standard; DNA; 20 BP.
XX
XX AC ABZ25473;
XX
XX DT 02-APR-2003 (first entry)
XX
XX DE Nicotiana tabacum peroxidase PCR primer, SEQ ID 20.
XX
XX Plant growth regulant; peroxidase; enzyme; stress-resistant; plant; PCR;
KM primer; ss.
XX
XX OS Synthetic.
XX
XX PN JP2002281979-A.
XX
XX PD 02-OCT-2002.
XX
XX PF 28-MAR-2001; 2001JP-00091994.
XX
XX 28-MAR-2001; 2001JP-00091994.
XX
XX (TOYT) TOYOTA JIDOSHA KK.
PA
XX WPI; 2003-170475/17.
XX
XX A new stress-resistant plant comprises a gene encoding a protein with
PT

PT peroxidase activity.
XX
PS Example 4; Page 11; 24pp; Japanese.
XX
CC The present invention relates to proteins with peroxidase activity and
CC their coding sequences (AB225464-AB225465 and ABP70670). The
CC peroxidase coding sequences were used to generate a transformed stress-
CC resistant plant. The present primer was used in an example from the
CC invention
XX
SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 5.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 4539 CCAGTATCGAGACGACTGA 4558
20 CGAGTTTCGAGACGACTGA 1
XX
Db
XX
RESULT 406
ACC84083/c
XX ID ACC84083 standard; DNA; 20 BP.
XX
XX ACC84083;
AC
XX 22-SEP-2003 (first entry)
DT
XX
XX Chicken ovomucoid 5' regulatory region sequencing primer OVMU4.
DE
XX
XX Ovomucoid; promoter; chicken; transgenic; avian; primer; ss.
KM
XX
XX Synthetic.
OS
XX
XX WO2003048364-A2.
PN
XX
XX 12-JUN-2003.
PD
XX
XX 02-DEC-2002; 2002MO-US038413.
PF
XX
XX 30-NOV-2001; 2001US-00998716.
PR
XX
XX (AVIG-) AVIGENICS INC.
PA
XX
XX Harvey AJ, Wang Y;
PI
XX
XX WPI; 2003-482715/45.
DR
XX
XX Isolated nucleic acid comprising avian ovomucoid gene expression control
PT region, useful for directing expression of a nucleic acid encoding a
PT polypeptide e.g., immunoglobulin, in an avian, preferably chicken cell.
PT
XX
XX Example 3; Fig 3; 75pp; English.
PS
XX
XX The present sequence is that of sequencing primer OVMU4, which was used
CC to sequence the chicken ovomucoid gene expression control region (see
CC ACC84070). A claimed nucleic acid comprises the ovomucoid gene expression
CC control region operably linked to a nucleotide sequence encoding a
CC heterologous polypeptide, especially an immunoglobulin subunit or
CC interferon alpha-2b. The nucleic acid is used to express the heterologous
CC polypeptide in a host (especially avian) cell or in a transgenic avian,
CC which produces the heterologous polypeptide in the serum or egg white
CC
XX
SQ Sequence 20 BP; 7 A; 2 C; 7 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 5.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 984 ACTCTCTACCAAGCTCTTC 1003
20 AGCTCTTACCAAGCTCTTC 1
XX
Db

RESULT 407
ADD25028/c
XX ID ADD25028 standard; DNA; 20 BP.
XX
XX ADD25028;
AC
XX
XX 15-JAN-2004 (first entry)
DT
XX
XX Human caspase-8 antisense oligonucleotide ISIS 107677.
DE
XX
XX Caspase-8; cytosolic; immunosuppressant; anti-HIV; ss;
XX antisense gene therapy; apoptosis; hyperproliferative disorder;
XX hematopoietic disorder; autoimmune disorder; viral infection; AIDS;
XX neurological disorder; Alzheimer's disease; Parkinson's disease;
XX amyotrophic lateral sclerosis; retinitis pigmentosa; blood cell disorder;
XX cancer; human.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residues"
FT -methycytidines"
FT 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residues"
FT 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residues"
XX
XX US2003083296-A1.
XX
XX 01-MAY-2003.
PD
XX
XX 12-JUL-2002; 2002US-00181177.
PF
XX
XX 19-JAN-2000; 2000US-00487445.
PR
XX
XX 11-JAN-2001; 2001MO-US000955.
PA
XX
XX (ZHAN/) ZHANG H.
PA (COWS/) COWSERT L. M.
PI
XX
XX Zhang H, Cowser LM;
PI
XX
XX WPI; 2003-810793/76.
DR
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding caspase 8, useful for treating a disease/condition
PT associated with caspase 8, such as hyperproliferative or autoimmune
PT disorders.
XX
XX Example 15; SEQ ID NO 85; 59pp; English.
PS
XX
XX The invention relates to a compound 8-30 nucleobases in length targeted
CC to, and which specifically hybridizes with a nucleic acid molecule
CC encoding caspase 8 (a protein involved in apoptosis), and inhibits the
CC expression of caspase 8, i.e. an antisense oligonucleotide. Also included
CC are a compound 8-30 nucleobases in length that specifically hybridizes
CC with at least an 8-nucleobase portion of an active site on a nucleic acid
CC molecule encoding caspase 8, a composition comprising the compound and a
CC carrier or diluent, inhibiting the expression of caspase 8 in cells or
CC tissues (by contacting the cells or tissues with the compound so that
CC expression of caspase 8 is inhibited) and treating an animal having a
CC disease or condition associated with caspase 8 by administering to the
CC animal a therapeutic or prophylactic amount of the compound so that
CC expression of caspase 8 is inhibited. The compound, composition and
CC methods are useful for treating a disease or condition associated with

CC caspase 8, such as hyperproliferative, haematopoietic or autoimmune
 CC disorder, viral infection such as AIDS, neurological disorders (e.g.
 CC Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis,
 CC retinitis pigmentosa), blood cell disorders and cancer. They are also
 CC useful in research and diagnostics for modulating the expression of
 CC interleukin 8. The present sequence is a caspase-8 targeting antisense
 CC oligonucleotide of the invention.

SQ Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 16.8; DB 1; Length 20;
 Best Local Similarity 90.0%; Pred. No. 5.6e+02;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Db 3175 CTTTGCAGAGCTGAGACA 3194
 20 CTTTGCAGAGCTGAGACA 1

RESULT 408
 ABX12194/c
 ID ABX12194 standard; DNA; 20 BP.
 XX
 AC ABX12194;
 XX
 DT 16-MAY-2003 (first entry)
 XX
 DE Human cholesterol ester transfer protein, antisense oligo #15.
 XX
 KM Human; cholesterol ester transfer protein; lipid metabolism;
 KW cholesterol metabolism; atherosclerosis; cardiovascular disease;
 XX antisense; probe; ss.
 OS Homo sapiens.
 XX

PH Key Location/Qualifiers
 FT modified_base 1..20
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate nucleotides; all cytidine
 modified_base 1..6
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
 FT modified_base 15..20
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
 XX
 PN MO2003014306-A2.
 XX
 PD 20-FEB-2003.
 XX
 PF 05-AUG-2002; 2002MO-US024919.
 XX
 PR 08-AUG-2001; 2001US-00925139.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Crooke RM, Graham MJ, Nero PS, Wanciewicz E;
 XX WPI; 2003-256564/25.
 DR
 XX
 PT New antisense compound, useful for preparing a composition for treating
 PT abnormal lipid or cholesterol metabolism, atherosclerosis or
 PT cardiovascular disease.
 XX
 PS Claim 3; Page 96; 114pp; English.
 XX
 CC The invention relates to new antisense compounds targeted to a nucleic
 CC acid molecule encoding human cholesterol ester transfer protein,
 CC specifically hybridizes with it and inhibits the expression of human
 CC cholesterol ester transfer protein. The compound is useful for preparing
 CC a composition for treating abnormal lipid or cholesterol metabolism,
 CC atherosclerosis or cardiovascular disease. The present sequence

CC represents a human cholesterol ester transfer protein, antisense
 CC oligonucleotide of the invention

SQ Sequence 20 BP; 3 A; 10 C; 4 G; 3 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 16.8; DB 1; Length 20;
 Best Local Similarity 90.0%; Pred. No. 5.6e+02;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Db 1063 GCAGTGTCTGGAGCTGGAG 1082
 20 GCAGTGTCTGGAGCTGGAG 1

RESULT 409
 ABS58313/c
 ID ABS58313 standard; DNA; 20 BP.
 XX
 AC ABS58313;
 XX
 DT 21-FEB-2003 (first entry)
 XX
 DE Silkworm spider dragline silk gene (Maspl) specific PCR primer #1.
 XX
 KM Silkworm; primer; ss; spider drag-line; silk; fibroin; PCR; light chain;
 KW L chain; Maspl.
 XX
 OS Bombyx mori.
 XX
 PN US2002137211-A1.
 XX
 PD 26-SEP-2002.
 XX
 PF 04-OCT-2001; 2001US-00969852.
 XX
 PR 02-JAN-2001; 2001CN-00106406.
 XX
 PA (UYSI-) UNIV SICHUAN TIANYOU BIOLOGIC ENG CO LTD.
 XX
 PI Liu T, Liu H, Li W, Zhao L;
 XX WPI; 2003-110604/10.
 DR
 XX
 PT Establishing expression systems of spider drag-line silk genes in
 PT silkworms, by fusing silkworm fibroin L-chain cDNA and its promoter
 PT upstream of spider drag-line silk gene cDNA to direct drag-line protein
 PT expression and secretion.
 XX
 PS Example 1; Page 2; 19pp; English.
 XX
 CC This invention relates to a novel method for establishing an expression
 CC system of spider drag-line silk genes in silkworm by fusing the silkworm
 CC fibroin L-chain cDNA and its promoter upstream of the spider drag-line
 CC silk gene cDNA, ligating the fused gene with a reporter gene and
 CC inserting into a transposon to obtain a recombinant transposon which can
 CC be used to transform a silkworm egg. The method of the invention is
 CC useful for establishing an expression system of spider drag-line silk
 CC gene in B. mori. The spider dragline silk gene product accounts for 30%
 CC of total silk proteins. This method provides a rate of transformation of
 CC about 0.5-1%. The present sequence represents a PCR primer used to
 CC amplify the silkworm spider dragline silk gene (Maspl) sequence used in
 CC the method of the invention

SQ Sequence 20 BP; 5 A; 5 C; 9 G; 1 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 16.8; DB 1; Length 20;
 Best Local Similarity 90.0%; Pred. No. 5.6e+02;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Db 2640 CCTGCAGCTGCTGCTGACG 2659
 20 CCTGCAGCTGCTGCTGCTG 1

RESULT 410	
ADH64643/c	
ID	ADH64643 standard; DNA; 20 BP.
XX	
AC	ADH64643;
XX	
DT	25-MAR-2004 (first entry)
XX	
DE	Human glucocorticoid receptor-specific antisense oligonucleotide #1477.
XX	
KM	antisense oligonucleotide; glucocorticoid receptor; infection;
KM	inflammation; tumour formation; diabetes; obesity;
KM	cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
XX	phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
OS	Homo sapiens.
XX	
PN	MO2003099215-A2.
XX	
PD	04-DEC-2003.
XX	
PF	20-MAY-2003; 2003WO-US016084.
XX	
PR	20-MAY-2002; 2002US-0381857P.
XX	
PA	(PHAA) PHARMACIA CORP.
XX	
FI	Crosby SD, Nalaeeth AE;
XX	
DR	WPI; 2004-035034/03.
XX	
PT	New antisense compound targeted to a nucleic acid molecule encoding
PT	mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT	cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX	
PS	Claim 4; SEQ ID NO 1477; 985bp; English.
XX	
CC	The invention comprises an antisense oligonucleotides that are targeted
CC	to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC	antisense oligonucleotides of the invention are useful for preventing or
CC	delaying infection, inflammation or tumour formation. The antisense
CC	oligonucleotides are also useful for treating diabetes, obesity,
CC	cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC	present DNA sequence represents an antisense oligonucleotide that targets
CC	the human glucocorticoid receptor gene. NOTE: The present sequence
CC	contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX	
SQ	Sequence 20 BP; 1 A; 12 C; 0 G; 7 T; 0 U; 0 Other;
Query Match	0.3%; Score 16.8; DB 1; Length 20;
Best Local Similarity	90.0%; Pred. NO.5.6e+02;
Matches 18; Conservative	0; Mismatches 2; Indels 0; Gaps 0
Cy	2564 AGGGGAGAGAGAGATGGAG 2583
Db	20 AGGGGAGAGAGAGATGGAG 1
RESULT 411	
ADH65015/c	
ID	ADH65015 standard; DNA; 20 BP.
XX	
AC	ADH65015;
XX	
DT	25-MAR-2004 (first entry)
XX	
KM	Human glucocorticoid receptor-specific antisense oligonucleotide #1849.
KM	inflammation; tumour formation; diabetes; obesity;
KM	cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KM	phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.

OS	XX	Hom sapiens.
XX	XX	
XX	XX	WO2003099215-A2.
XX	XX	
XX	XX	04-DEC-2003.
XX	XX	
XX	XX	20-MAY-2003; 2003WO-US016084.
XX	XX	
XX	XX	20-MAY-2002; 2002US-0381857P.
XX	XX	
XX	XX	(PHAA) PHARMACIA CORP.
XX	XX	
XX	XX	Crosby SD, Naleeth AE;
XX	XX	
XX	XX	WPI; 2004-035034/03.
XX	XX	
XX	XX	New antisense compound targeted to a nucleic acid molecule encoding
XX	XX	mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
XX	XX	cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX	XX	
XX	XX	Claim 4; SEQ ID NO 1849; 985bp; English.
XX	XX	
XX	XX	The invention comprises an antisense oligonucleotides that are targeted
XX	XX	to nucleic acids encoding a mammalian glucocorticoid receptor. The
XX	XX	antisense oligonucleotides of the invention are useful for preventing or
XX	XX	delaying infection, inflammation or tumor formation. The antisense
XX	XX	oligonucleotides are also useful for treating diabetes, obesity,
XX	XX	cardiovascular disorders, hyperlipidemia or Cushing's syndrome. The
XX	XX	present DNA sequence represents an antisense oligonucleotide that targets
XX	XX	the human glucocorticoid receptor gene. NOTE: The present sequence
XX	XX	contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX	XX	
XX	XX	Sequence 20 BP; 1 A; 12 C; 0 G; 7 T; 0 U; 0 Other;
XX	XX	
XX	XX	Query Match 0.3%; Score 16.8; DB 1; Length 20;
XX	XX	Best Local Similarity 90.0%; Pred. No. 5.6e+02;
XX	XX	Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0.
XX	XX	
XX	XX	2565 GGGGAGAGAGAGATGGAGA 2584
XX	XX	
XX	XX	20 GGGGAGAGAGAGATGGAGA 1
XX	XX	
XX	XX	RESULT 412
XX	XX	ADK7444/C
XX	XX	ID ADK74444 standard; DNA; 20 BP.
XX	XX	
XX	XX	AC ADK74444;
XX	XX	
XX	XX	20-MAY-2004 (first entry)
XX	XX	
XX	XX	Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1778.
XX	XX	
XX	XX	Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
XX	XX	diabetic neuropathy; arthritic pain; migraine headache;
XX	XX	infantile epilepsy; ataxia; ss.
XX	XX	
XX	XX	Synthetic.
XX	XX	
XX	XX	WO2004016754-A2.
XX	XX	
XX	XX	26-FEB-2004.
XX	XX	
XX	XX	14-AUG-2003; 2003WO-US025465.
XX	XX	
XX	XX	14-AUG-2002; 2002US-0403416P.
XX	XX	
XX	XX	(PHAA) PHARMACIA CORP.
XX	XX	
XX	XX	Roberde SL;
XX	XX	
XX	XX	WPI; 2004-203785/19.

XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
PS Claim 4; SEQ ID NO 1778; 417bp; English.
XX
CC The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
SQ Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
Query Match 0.3%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 5.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1676 GAAAAGATGGACAGCCACT 1695
DB 20 GAAAAGATGGACAGCCACT 1
RESULT 413
ADP11348/C
ID ADP11348 standard; DNA; 20 BP.
XX
AC ADP11348;
XX
DT 12-AUG-2004 (first entry)
XX
DE Tagman probe of the invention #31.
XX
KM transplant rejection; immune system; rheumatoid arthritis; lupus;
XX inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; probe.
OS Homo sapiens.
XX
PN WO2004042346-A2.
XX
PD 21-MAY-2004.
XX
PF 24-APR-2003; 2003WO-US012946.
XX
PR 24-APR-2002; 2002US-00131831.
XX 20-DEC-2002; 2002US-00325899.
XX
PA (EXPR-) EXPRESSION DIAGNOSTICS INC.
XX
PI Wohlgemuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;
PI Rosenberg S;
XX
DR WPI; 2004-400724/37.
XX
PT Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
PT pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
PT rejection, in an individual, comprises detecting the expression level of
PT the genes.
XX
PS Claim 58; SEQ ID NO 1357; 1762bp; English.
XX
CC The present invention relates to diagnosing or monitoring transplant

CC rejection, e.g. cardiac or kidney transplant rejection, in an individual
CC comprises detecting the expression level of one or more genes. The
CC methods, system and kits are useful in diagnosing or monitoring
CC transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
CC islet, lung, bone marrow or stem cell transplant rejection,
CC xenotransplant rejection or mechanical organ replacement rejection, in an
CC individual. The method is also useful in assessing the immune status of
CC an individual. The methods are also useful in diagnosing and monitoring
CC diseases that involve the immune system, e.g. rheumatoid arthritis,
CC lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
CC viral, bacterial or fungal infection. The present sequence represents a
CC Tagman probe for a 50 mer oligonucleotide marker for diagnosis and
CC monitoring of allograft rejection and other disorders.
XX
SQ Sequence 20 BP; 5 A; 11 C; 4 G; 0 T; 0 U; 0 Other;
Query Match 0.3%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 5.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2084 GGGTGTCTGCTGGCTTC 2103
DB 20 GGGTGTCTGCTGGCTTC 1
RESULT 414
AAQ91937
ID AAQ91937 standard; DNA; 21 BP.
XX
AC AAQ91937;
XX
DT 25-MAR-2003 (revised)
DT 28-NOV-1995 (first entry)
XX
DE T-cell receptor Va7 hybridisation probe.
XX
KM T-cell Receptor alpha; TCR; variable region Va7; multiple sclerosis;
XX autoimmune disease; neurodegeneration; uveal melanoma; ss.
OS Synthetic.
XX
PN MO9508572-A1.
XX
PD 30-MAR-1995.
XX
PF 22-SBP-1994; 94WO-US010728.
XX
PR 22-SBP-1993; 93US-00125407.
XX
PA (STRD) UNIV IELAND STANFORD JUNIOR.
XX
PI Steinman L, Oksenberg J, Bernard C, Zamvil S, Mitchell DU;
PI Karin N;
XX
DR WPI; 1995-139558/18.
XX
PT Determining relation between auto-immune degenerative diseases and
PT specific variable regions of T-cell receptors - as associated with the
PT host HLA or T-cells associated with combating neoproliferative diseases.
XX
PS Example 1; Page 35; 122bp; English.
XX
CC TCR Va families expressed in human uveal melanoma were analysed by PCR
CC amplification. In 7 of the 8 cases, the Va7 region was expressed and
CC rearranged. The identity was confirmed by hybridisation to a Va7 probe
CC (AAQ91937). The variable regions associated with different
CC neoproliferative tissues may be determined in this way; a homogeneous
CC composition of T-cells may then be administered for treatment of the
CC particular neoproliferative tissue. (Updated on 25-MAR-2003 to correct PN
CC field.)
XX
SQ Sequence 21 BP; 5 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.8; DB 1; Length 21;
 Best Local Similarity 90.0%; Pred. No. 5.6e+02;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 560 TGGAGTTCCTGGAAGAGAG 579
 DB 2 TGGAGCTCCTGTGGAAGAG 21

RESULT 415
 AAQ75729/c
 ID AAQ75729 standard; DNA; 21 BP.
 XX
 AC AAQ75729;
 XX
 DT 04-AUG-1995 (first entry)
 XX
 DE Reverse transcription primer used in cDNA analysis technique.
 XX
 KW Analysis; gene expression; reverse transcription; primer; cDNA;
 XX aggregate; restriction enzyme; ss.
 XX
 OS Synthetic.
 XX
 PN JP06303997-A.
 XX
 PD 01-NOV-1994.
 XX
 PF 16-APR-1993; 93JP-00112515.
 XX
 PR 16-APR-1993; 93JP-00112515.
 XX
 PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX
 DR WPI; 1995-018287/03.
 XX
 PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 PS Disclosure; Page 8; 11pp; Japanese.
 XX
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENBSEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily.
 XX
 SQ Sequence 21 BP; 2 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
 Query Match 0.3%; Score 16.8; DB 1; Length 21;
 Best Local Similarity 90.0%; Pred. No. 5.6e+02;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 5389 AATTAAAAAATTCAAAAA 5408
 DB 21 AATTAAAAAATTCAAAAA 2
 RESULT 416
 AAT92734
 ID AAT92734 standard; cDNA; 21 BP.
 XX
 AC AAT92734;
 XX
 DT 25-MAR-2003 (revised)
 DT 04-FEB-1998 (first entry)
 XX
 DE V-alpha7 probe for T-cell receptor.
 XX
 KW Probe; hybridise; T-cell receptor; TCR V-alpha; TCR V-beta; brain; MS;
 XX

KW T-cell detection; multiple sclerosis; cerebrospinal fluid; human; CDR3;
 KW therapy; T-cell ablation; complementarily determining region 3; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN US5667967-A.
 XX
 PD 16-SEP-1997.
 XX
 PF 21-MAY-1993; 93US-00066325.
 XX
 PR 01-MAY-1990; 90US-00517245.
 PR 01-MAY-1991; 91MO-US002991.
 PR 30-APR-1992; 92US-00877444.
 XX
 PA (STRD) UNIV IELAND STANFORD JUNIOR.
 XX
 PI Bernard C, Steinman L, Oksenberg J;
 XX
 DR WPI; 1997-470032/43.
 XX
 PT Diagnosis of multiple sclerosis - by detection of T-cell receptor V-alpha
 PT or V-beta rearrangements in T-cells from the brain or cerebrospinal
 PT fluid.
 PS Example; Col 18; 52pp; English.
 XX
 CC AAT92734 and AAT92735 represent probes for the V-alpha chain of the T-
 CC cell receptor (TCR). This sequence can be used in the method of the
 CC invention. The method of the invention is for determining the presence,
 CC in a human host, of T-cells associated with multiple sclerosis (MS). The
 CC method comprises isolating T-cells from the brain or cerebrospinal fluid
 CC of a human host, and detecting in the T-cells the presence of a limited
 CC number of rearranged complementarily determining region 3 (CDR3) regions
 CC of the TCR V-alpha or V-beta chains. The rearrangements that are detected
 CC are associated with MS. The detection is carried out by isolating nucleic
 CC acid molecules from the TCR, and amplifying the molecules with primers
 CC specific for sequences 5' and 3' of the rearranged CDR3 region (such as
 CC AAT92727-192757). The method can be used for the diagnosis of MS. In
 CC addition, by identifying specific TCR variable regions associated with
 CC the disease, therapies may be employed to inhibit the attack of the T-
 CC cells having such variable regions on the target cells or proteins. The
 CC therapies may involve ablation of T-cells carrying the particular
 CC variable regions, administration of compounds which inhibit binding of
 CC the T-cell receptor to the target cell, or prevention of the degenerative
 CC effects of the binding of the T-cell to the target cell or protein.
 CC (Updated on 25-MAR-2003 to correct PF field.)
 XX
 SQ Sequence 21 BP; 5 A; 4 C; 8 G; 4 T; 0 U; 0 Other;
 Query Match 0.3%; Score 16.8; DB 1; Length 21;
 Best Local Similarity 90.0%; Pred. No. 5.6e+02;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 560 TGGAGTTCCTGGAAGAGAG 579
 DB 2 TGGAGCTCCTGTGGAAGAG 21
 RESULT 417
 AAT76098/c
 ID AAT76098 standard; DNA; 21 BP.
 XX
 AC AAT76098;
 XX
 DT 12-SEP-1997 (first entry)
 DT 04-FEB-1998 (first entry)
 XX
 DE Human histidine decarboxylase antisense oligonucleotide HUMHDCAS2.
 XX
 KW Asthma; airway epithelium; adenosine free; cystic fibrosis;
 KW chronic obstructive pulmonary disease; bronchitis; ss.
 XX

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OS Synthetic.
XX
XX WO9640162-A1.
XX
XX 19-DEC-1996.
XX
XX PF 06-UTN-1996; 96WO-US009306.
XX
XX PR 07-JUN-1995; 95US-00474497.
XX
XX (UYEC-) UNTV EAST CAROLINA.
XX
XX PI Nyce JW, Metzger WJ;
XX
XX DR WPI, 1997-051871/05.
XX
XX PT Treatment of airway diseases such as asthma - by topically applying
XX adenosine-free antisense oligonucleotide to airway epithelium of
XX subject.
XX
XX PS Claim 5; Page 26; 71pp; English.
XX
XX CC A method for treating airway disease in a subject has been produced,
XX which involves the topical administration of an essentially adenosine
XX free antisense oligonucleotide (ON) to the airway epithelium of the
XX subject. The present sequence is an antisense oligonucleotide HUMHDCAS2
XX specific for the human histidine decarboxylase. The method can be used to
XX treat airway diseases such as cystic fibrosis, asthma, chronic
XX obstructive pulmonary disease, bronchitis and other airway diseases
XX characterised by an inflammatory response. By eliminating adenosine from
XX the antisense ON, its liberation upon antisense degradation is prevented,
XX thereby preventing adenosine- induced bronchoconstriction in patients
XX with hyper-reactive airways
XX
XX SQ Sequence 21 BP; 0 A; 10 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 5.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1179 CAGAGAAAGAGAGAGAGAG 1198
DB 20 CAGAGAGAGAGAGAGAGAGA 1

RESULT 418
AAV27994
ID AAV27994 standard; DNA; 21 BP.
XX
XX AC AAV27994;
XX
XX DT 25-SEP-1998 (first entry)
XX
XX DE Ataxia telangiectasia exon 19 primer 1.
XX
XX KW ss; PCR; primer; amplification; ataxia telangiectasia; diagnosis; human;
XX radiation; breast cancer.
XX
XX OS Synthetic.
XX Homo sapiens.
XX
XX PN WO9822621-A1.
XX
XX PD 28-MAY-1998.
XX
XX PF 17-NOV-1997; 97WO-US020953.
XX
XX PR 20-NOV-1996; 96US-00753147.
XX
XX (VIRG-) VIRGINIA MASON RBS CENT.
XX
XX PI Concannon P;
XX

```

```

DR WPI, 1998-312503/27.
XX
XX Method of detecting ataxia telangiectasia - comprises use of primers
XX based on intron-exon boundaries, useful for diagnosing disease in
XX heterozygotes.
XX
XX PS Claim 6; Page 6; 47pp; English.
XX
XX PR The primers AAV27964-V28086 are used to amplify ataxia telangiectasia
XX (ATM) exons and their adjacent splice junction sites. These can be used
XX as a method of detecting a mutation in the ATM gene by comparing the PCR
XX products of amplification from a sample from a patient suspected of
XX having an ATM mutation with a sample from a non-mutated ATM patient. This
XX method is especially useful for diagnosing ataxia telangiectasia in
XX heterozygotes and can be used to locate the positions of the mutation.
XX The diagnosis of ataxia telangiectasia in patients needing therapeutic
XX radiation will prevent fatal radiation burns and the development of
XX breast cancer which can occur
XX
XX SQ Sequence 21 BP; 7 A; 2 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 5.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3639 AATTGCTGAGATTGACAGAG 3658
DB 1 AATTGCTGAGATTACGAGAG 20

RESULT 419
AAV19906/C
ID AAV19906 standard; DNA; 21 BP.
XX
XX AC AAV19906;
XX
XX DT 11-UTN-1999 (first entry)
XX
XX DE Streptococcus pneumoniae ATP-binding phoH gene PCR primer #2.
XX
XX KW Streptococcus pneumoniae; phoH; antibacterial; infection; pneumonia;
XX ATP-binding protein; otitis media; conjunctivitis; bacteremia;
XX sinusitis; pleural empyema; endocarditis; meningitis; PCR primer; ss.
XX
XX OS Synthetic.
XX Streptococcus pneumoniae.
XX
XX PN BP903407-A2.
XX
XX PD 24-MAR-1999.
XX
XX PF 04-SEP-1998; 98BP-00307171.
XX
XX PR 18-SEP-1997; 97US-00932978.
XX
XX (SMIK ) SMITHKLINE BECKMAN CORP.
XX
XX PI Zalacain M, Brown JR;
XX
XX DR WPI, 1999-182905/16.
XX
XX PT New Streptococcus pneumoniae phoH polypeptide and polynucleotide - useful
XX as diagnostic reagents and for prevention and treatment of Streptococci
XX infections which cause conjunctivitis and meningitis.
XX
XX PS Disclosure; Page 14; 25pp; English.
XX
XX The present sequence represents a PCR primer for the Streptococcus
XX pneumoniae phoH protein, a member of the ATP-binding protein family. The
XX phoH protein is administered to treat individuals in need of phoH
XX proteins (directly or via a vector i.e. gene therapy), and as an antigen
XX for inducing an immunological response (administered directly i.e.
XX vaccine). They can prevent adhesion of bacteria to matrix proteins, and
XX

```

are useful for use on wounds and body implants to prevent bacterial infection. They are also useful for identifying agonists and antagonists by screening host cells expressing phoB protein, and detecting the absence or presence of phoB activity. Agonists and antagonists are useful for inhibition and treatment of conditions associated with phoB imbalance, and are therefore potential antibacterial compounds. PhoB polynucleotides are useful for genetic immunisation, preferably via a vector. Anti-phoB antibodies induced by the protein are useful for preventing or treating infections, especially bacterial infections, and also for isolating clones expressing phoB protein, or for purifying the protein by affinity chromatography. Diseases can be diagnosed by determining the presence of phoB nucleic acid, and/or analysing for the presence or amount of phoB protein in a sample, due to an infection of an organism with the phoB gene. The stage and type of infection can be determined. Diseases prevented, diagnosed and treated include those caused by bacterial infection, especially Streptococci pneumoniae infection which causes otitis media, conjunctivitis, pneumonia, bacteraemia, sinusitis, pleural empyema, endocarditis and especially meningitis

SQ Sequence 21 BP; 8 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match	0.3%	Score 16.8	DB 1	Length 21
Best Local Similarity	90.0%	Pred. No. 5.6e+02		
Matches 18	Conservative 2	Mismatches 0	Indels 0	Gaps 0

QY	4932	GAAC	TTGATGATGATG	CC	TTG	4951
Db	21	GAC	CTTGATGATG	CC	TTG	2

RESULT 420
AAK53903/c
ID AAK53903 standard; DNA; 21 BP.

AC AAX53903;

DT 05-JUL-1999 (first entry)

Hisidine decarboxylase receptor antisense oligonucleotide.

KM Antisense oligonucleotide; multiple target; antisense treatment;
KM impaired respiration; inflammation; lung disease;
KM pulmonary vasoconstriction; inflammation; allergic rhinitis;
KM acute asthma; allergy; asthma; impaired respiration;
KM respiratory distress syndrome; pain; cystic fibrosis;
KM pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KM chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KM colon cancer; breast cancer; lung cancer; pancreatic cancer;
KM hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KM prostate cancer; ss.

OS Synthetic.

PN WO9913886-A1

PD 25-MAR-1999.

PF 17-SEP-1998; 98WO-US019419.

PR 17-SEP-1997; 97US-0059160P.

PR 09-JUN-1998; 98US-00093972.

PA (UYEC-) UNIV EAST CAROLINA.

PI NYce JW;

DR WPI; 1999-229400/19.

PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT vasoconstriction.

PS Disclosure; Page 45; 120pp; English.

xx The specification describes antisense oligonucleotides (AA552869-X55271) directed against at least 2 mRNAs selected from target genes, coding and non-coding regions of RNAs corresponding to target genes, gene initiation codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-end and the junction-section between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases, conditions or mixtures. The antisense oligonucleotides may be derived from sequences AA55272-74. These multiple target oligonucleotides (specifically AA55180-271) can be used for the antisense treatment of diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases, pulmonary vasconstriction, inflammation, allergic rhinitis, acute asthma, allergies, asthma, impaired respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, pulmonary vasconstriction, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g. colon cancer, breast cancer, lung cancer, pancreatic cancer, hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as well as all types of cancers which may metastasize or have metastasized to the lungs, including breast and prostate cancer

SQ Sequence 21 BP; 0 A; 10 C; 1 G; 10 T; 0 U; 0 Other;

Query Match	0.3%	Score 16.8	DB 1	Length 21
Best Local Similarly	90.0%	Pred. No. 5.6e+02		
Matches 18; Conservative	0;	Mismatches 2;	Indels 0;	Gaps 0;

QY 1179 CAGAGAAGAGAGAGAGA 1198
||| ||| ||| ||| |||
Db 20 CAGAGACAGAGGAGAGAGA 1

RESULT 421
AAA33346/c
ID AAA33346 standard; DNA; 21 BP.

AC AAA33346

DT 28-JUL-2000 (first entry)

DE Low adenosine antisense oligonucleotide SEQ ID NO:1035.

KM Human, adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory; KM antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; KM lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; KM respiratory distress syndrome; pain; cystic fibrosis; emphysema; KM pulmonary hypertension; chronic obstructive pulmonary disease; COPD; KM cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

OS Homo sapiens

PN W0200009525-A2

PD 24-FEB-2000.

PF 03-AUG-1999; 99WO-US017712

PR 03-AUG-1998; 98US-0095212P

PA (UYEC-) UNIV EAST CAROLINA.

PI NYce JW,

DR WPI; 2000-205971/18.

PT New antiscense oligonucleotides useful for treating e.g. pulmonary
PT vasoconstriction, inflammation, allergies, asthma, hypertension,
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT cancers.

PS Claim 18; Page 394; 1343pp; English.
XX
XX The present invention describes a new composition comprising an antisense
CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC nucleic acids involved in bronchoconstriction, allergies, and/or
CC inflammation. The ON can have antiinflammatory, antiallergic,
CC antiasthmatic, cyostatic and analgesic activities. The compositions are
CC useful for treatment of diseases associated with inflammation,
CC impaired airways, including lung disease and diseases whose secondary
CC effects afflict the lungs of a subject. They can be used for treating
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC impaired respiration, respiratory distress syndrome, pain, cystic
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC carcinomas, and cancers which may metastasise to the lungs, including
CC breast and prostate cancer. The reduction of the adenosine content of the
CC ONs reduces side effects. The A-containing ONs break down with the
CC release of deoxyadenosine which activates adenosine receptors causing the
CC bronchoconstriction and inflammation. AAA2313 to AAA3312 represent the
CC nucleotide sequences given in the sequence listing from the present
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC from the previously named sequences. SEQ ID NO:11 to 1880 (AAA32323 to
CC AAA3392) are specifically claimed ONs from the present invention. N.B.
CC Sequences given in the disclosure of the present invention do not match
CC up with their corresponding SEQ ID NO: sequences given in the sequence
CC listing
XX
SQ Sequence 21 BP; 0 A; 10 C; 1 G; 10 T; 0 U; 0 Other;
Query Match 0.3%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 5.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1179 CAGAGAAAGAGAGAGAGAGA 1198
DB 20 CAGAGAGAGAGAGAGAGAGA 1
RESULT 422
AAF19468/c
ID AAF19468 standard; DNA; 21 BP.
XX
XX AAF19468;
AC
XX
DT 14-MAR-2001 (first entry)
XX
XX Human histidine decarboxylase polynucleotide fragment #1035.
DE
XX
XX Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KM human; airway disorder; bronchoconstriction; lung inflammation;
KM surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KM immunosuppressive; antiasthmatic; analgesic; hypotensive; cyostatic;
KM respiratory obstruction; pulmonary obstruction; impeded respiration;
KM surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KM respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KM pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KM chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KM cancer; ss.
XX
XX Homo sapiens.
OS
XX
XX WO200062736-A2.
PN
XX
XX 26-OCT-2000.
PD
XX
XX 24-MAR-2000; 2000WO-US008020.
PF
XX
XX 06-APR-1999; 99US-0127958P.
PR
XX
XX (UYEC-) UNITV EAST CAROLINA.
PA (NYCE/) NYCE J W.
XX

PI Nyce JW;
XX
XX WPI; 2000-679539/66.
DR
XX
XX Low adenosine (A) content antisense oligonucleotides which do not trigger
PT adenosine receptors during metabolism, useful e.g. for treating cancers
PT and respiratory obstructions.
XX
XX
PS Claim 14; Page 141; 1592pp; English.
XX
XX The present invention describes low adenosine (A) content antisense
CC oligonucleotides and compositions (I) comprising them. In the antisense
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC immunosuppressive, antiasthmatic, hypotensive and cyostatic activities.
CC The antisense oligonucleotides and (I) can be used to down-regulate the
CC expression and/or activity of target polypeptides associated with
CC lung/respiratory disorders and malignancies, such as stimulating and
CC activating peptide factors and transmitters, transcription factors,
CC immunoglobulins and antibodies, antibody receptors, cytokines and
CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central
CC nervous system (CNS) and peripheral nervous and non-nervous system
CC receptors, CNS and peripheral nervous and non-nervous system peptide
CC transmitters, defensins, growth factors, vasoactive peptides and
CC receptors, binding proteins and malignancy associated proteins. The
CC antisense oligonucleotides may be used in this way to treat disorders
CC including respiratory obstruction (especially pulmonary obstruction
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC surfactant hypoproduction which are associated with a disease or
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention
XX
SQ Sequence 21 BP; 0 A; 10 C; 1 G; 10 T; 0 U; 0 Other;
Query Match 0.3%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 5.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1179 CAGAGAAAGAGAGAGAGAGA 1198
DB 20 CAGAGAGAGAGAGAGAGAGA 1
RESULT 423
ABL43857
ID ABL43857 standard; DNA; 21 BP.
XX
XX ABL43857;
AC
XX
DT 11-APR-2002 (first entry)
XX
XX Human chromosome 1p36-35 PCR primer SEQ ID NO:901.
DE
XX
XX Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
KM PCR primer; ss.
KM
XX
XX Homo sapiens.
OS
XX
XX JP2001321190-A.
PN
XX
XX 20-NOV-2001.
PD
XX
XX 12-MAR-2001; 2001JP-00068285.
PF
XX
XX 10-MAR-2000; 2000JP-00066716.
PR

XX (RIKA) RIKAGAKU KENKYUSHO.
PA (GENO-) GENOTEX YG.
XX WPI, 2002-144136/19.
DR Arraying genome clones.
XX
PS Claim 4, Page 22, 528pp; Japanese.
XX
XX The present invention describes a method of arraying genome clones. The
CC method comprises: (a) clones of the genomic libraries contained in
CC multwell plates numbered for discrimination are mixed in each of the
CC multwell plates; (b) a primer designed based on the chromosome marker
CC sequence is added to the mixture to carry out an amplification reaction;
CC (c) a signal corresponding to the marker is detected from the resultant
CC amplified product to specify the discrimination Nos. of the multwell
CC plates containing the clones having said marker sequence; (d) the order
CC of the markers is changed so that the same discrimination Nos. succeed to
CC the maximum in the specified discrimination Nos. to array the multwell
CC plates; (e) the clones in the multwell plates of the specified
CC discrimination Nos. are mixed respectively in each well of longitudinal
CC and lateral directions; (f) the mixed clones are cultured and the
CC resultant cultures are amplified by using the above primer; (g) signals
CC are detected from the amplified products; (h) the clones in the multwell
CC plates are specified from the detected result; and (i) the clones are
CC reconstituted as the positions on the chromosome and arrayed. The
CC microarray is useful for gene analysis. ABL42957 to ABL4532 represent
CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
CC represent PCR primers for human chromosome 21q22.1, which are
CC specifically claimed for use in the present invention
XX
SO Sequence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
Query Match 0.3%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 5.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 3600 GGCTATCTCAACTCTCTGG 3619
DB 1 GGCTAATCTTGAACCTCTGG 20
RESULT 424
AB295162/c
ID AB295162 standard, DNA; 21 BP.
XX
AC AB295162;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human histidine decarboxylase antisease fragment no.1025.
XX
XX Human; antisease; lung dysfunction; nasal airway dysfunction;
KM antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KM antidiabetic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KM antisease gene therapy; respiratory; lung; adenosine sensitivity;
KM adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KM lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX
XX MO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002MO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (BPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;
XX WPI, 2003-229219/22.
DR
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisease to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 10404; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisease to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antidiabetic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisease gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SO Sequence 21 BP; 0 A; 10 C; 1 G; 10 T; 0 U; 0 Other;
Query Match 0.3%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. No. 5.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1179 CAGAGAAAGAGAGAGAGAGA 1198
DB 20 CAGAGAGAGAGAGAGAGAGA 1
RESULT 425
ADJ92226
ID ADJ92226 standard, DNA; 21 BP.
XX
AC ADJ92226;
XX
DT 06-MAY-2004 (first entry)
XX
DE Human hair keratin-associated-protein PCR primer P7 SEQ ID NO:85.
XX
XX hair; keratin-associated protein; KAP; human; keratin; toiletry;
KM therapeutic; hair growth promoter; hair disorder; PCR; primer; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX MO2003042387-A1.
XX
PN 22-MAY-2003.
XX
PD 13-NOV-2002; 2002MO-JP011851.
XX
PF 13-NOV-2001; 2001JP-00348050.
XX
PR (UYKR-) UNITV KEIO.
XX
PA (NIPR-) JAPAN SOC PROMOTION SCI.
XX
PI Kudo J, Shibuya K, Shimizu N;
XX
XX WPI, 2003-493307/46.


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XX 11-JUN-1992.
PD 25-NOV-1991; 91WO-US008811.
XX
XX 23-NOV-1990; 90US-00617907.
PR 18-JAN-1991; 91US-00643382.
PR 08-APR-1991; 91US-00683420.
PR 17-APR-1991; 91US-00686544.
PR 17-APR-1991; 91US-00686546.
PR 17-APR-1991; 91US-00686547.
PR 27-SEP-1991; 91US-00766733.
XX
XX (GILE-) GILEAD SCI INC.
XX
XX Froehner B, Krawczyk S, Matteucci MD, Milligan J;
XX WPI; 1992-217083/26.
XX
XX New oligomers cong. modified bases - which form a triplex with G-C
XX doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
XX herpes malignancy and inflammation.
XX
XX Claim 11; Page 64; 77pp; English.
XX
XX The sequence depicts a HUMTNFAA sequence beginning at nucleotide 1137.
XX The sequence is a viral duplex sequence which contains a purine-rich
XX region concentrated on one chain of the duplex. The sequence may be
XX prep. by standard DNA synthesis. The HUMTNFAA duplex sequence is used as
XX a target for novel oligomers which are capable of forming a triplex at
XX physiological pH by coupling into the major groove of the DNA duplex. Ten
XX such oligomers TNF 211-20 are capable of forming a triplex with this
XX sequence. The oligomers are used in the treatment of inflammation.
XX Similar oligomers may be used to target viral DNA duplexes specific for
XX HIV, herpes and other viruses. The triple helices form under mild
XX conditions thus assays may be carried out without subjecting the test
XX specimen to harsh conditions. The oligomer is able to inhibit gene
XX expression, as verified by in vitro systems. See also AAQ25452-25501 and
XX AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 22 BP; 11 A; 0 C; 11 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 16.8; DB 1; Length 22;
XX Best Local Similarity 90.0%; Pred. No. 5.7e+02;
XX Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1181 GAGAAAGAGAGAGAGAAA 1200
Db 1 GCGGAAAGAGAGAGAGAAA 20
XX
XX RESULT 428
XX AAT76387/c
XX ID AAT76387 standard; DNA; 22 BP.
XX
XX AAT76387;
XX
XX 15-SEP-1997 (first entry)
XX
XX Human tumour necrosis factor alpha antisense oligonucleotide HSTNFAA6.
XX
XX Asthma; airway epithelium; adenosine free; cystic fibrosis;
XX chronic obstructive pulmonary disease; bronchitis; ss.
XX
XX Synthetic.
XX
XX MO9640162-A1.
XX
XX 19-DEC-1996.
XX
XX 06-JUN-1996; 96WO-US009306.
XX
XX 07-JUN-1995; 95US-00474497.
XX

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XX (UYEC-) UNIV EAST CAROLINA.
XX
XX Nyce JW, Metzger WJ;
XX
XX WPI; 1997-051871/05.
XX
XX Treatment of airway diseases such as asthma - by topically applying
XX adenosine-free antisense oligo:nucleotide to airway epithelium of
XX subject.
XX
XX Claim 5; Page 37; 71pp; English.
XX
XX A method for treating airway disease in a subject has been produced,
XX which involves the topical administration of an essentially adenosine
XX free antisense oligonucleotide (ON) to the airway epithelium of the
XX subject. The present sequence is an antisense oligonucleotide HSTNFAA6
XX specific for the human tumour necrosis factor alpha. The method can be
XX used to treat airway diseases such as cystic fibrosis, asthma, chronic
XX obstructive pulmonary disease, bronchitis and other airway diseases
XX characterised by an inflammatory response. By eliminating adenosine from
XX the antisense ON, its liberation upon antisense degradation is prevented,
XX thereby preventing adenosine-induced bronchoconstriction in patients
XX with hyper-reactive airways
XX
XX Sequence 22 BP; 0 A; 11 C; 0 G; 11 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 16.8; DB 1; Length 22;
XX Best Local Similarity 90.0%; Pred. No. 5.7e+02;
XX Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1181 GAGAAAGAGAGAGAGAAA 1200
Db 22 GCGGAAAGAGAGAGAGAAA 3
XX
XX RESULT 429
XX AAX54536/c
XX ID AAX54536 standard; DNA; 22 BP.
XX
XX AAX54536;
XX
XX 05-JUL-1999 (first entry)
XX
XX Human adenosine A1 receptor antisense oligonucleotide fragment.
XX
XX Antisense oligonucleotide; multiple target; antisense treatment;
XX impaired respiration; inflammation; lung disease;
XX pulmonary vasoconstriction; inflammation; allergic rhinitis;
XX acute asthma; allergy; asthma; impeded respiration;
XX respiratory distress syndrome; pain; cystic fibrosis;
XX pulmonary hypertension; pulmonary vasoconstriction; emphysema;
XX chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
XX colon cancer; breast cancer; lung cancer; pancreatic cancer;
XX hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
XX prostate cancer; ss.
XX
XX Synthetic.
XX
XX MO9913886-A1.
XX
XX 25-MAR-1999.
XX
XX 17-SEP-1998; 98WO-US019419.
XX
XX 17-SEP-1997; 97US-0059160P.
XX 09-JUN-1998; 98US-00093972.
XX
XX (UYEC-) UNIV EAST CAROLINA.
XX
XX Nyce JW;
XX
XX WPI; 1999-229400/19.
XX

```

XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT vasoconstriction.
XX
PS Disclosure; Page 27; 120pp; English.

CC The specification describes antisense oligonucleotides (AAK52869-X55271)
CC directed against at least 2 mRNAs selected from target genes, coding and
CC non-coding regions of RNAs corresponding to target genes, gene initiation
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
CC end and the junction between coding and non-coding regions and all
CC segments of RNAs encoding proteins associated with one or more diseases,
CC conditions or mixtures. The antisense oligonucleotides may be derived
CC from sequences AAK55272-74. These multiple target oligonucleotides
CC (specifically AAK55180-271) can be used for the antisense treatment of
CC diseases and conditions. Typical diseases and conditions are those
CC associated with impaired respiration and inflammation, including lung
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC acute asthma, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC well as all types of cancers which may metastasize or have metastasized
CC to the lungs, including breast and prostate cancer

SQ Sequence 22 BP; 0 A; 11 C; 0 G; 11 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.8; DB 1; Length 22;
Best Local Similarity 90.0%; Pred. No. 5.7e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1181 GAGAAAGAGAGAGAGAAA 1200
DB 22 GGGGAAAGAGAGAGAGAAA 3

RESULT 430
AAK33980/c
ID AAA33980 standard; DNA; 22 BP.
AC AAA33980;
XX
XX 28-JUL-2000 (first entry)
DT
XX
DB Low adenosine antisense oligonucleotide SEQ ID NO:1669.
XX
XX Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW phosphothioate; impaired respiration; inflammation; allergy;
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiallergic; antiaesthetic; cytosolic; analgesic; impaired airway;
KW lung disease; ischemic condition; pulmonary vasoconstriction; asthma;
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

XX Homo sapiens.
XX
XX WO200009525-A2.
XX
XX 24-FEB-2000.
XX
XX 03-AUG-1999; 99WO-US017712.
XX
XX 03-AUG-1998; 98US-0095212P.
XX
XX (UYEC-) UNIV EAST CAROLINA.
XX
XX Myce JW;
XX
XX WPI, 2000-205971/18.
XX

PT New antisense oligonucleotides useful for treating e.g. pulmonary
PT vasoconstriction, inflammation, allergies, asthma, hypertension,
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT cancers.

PS Claim 18; Page 472; 1343pp; English.

CC The present invention describes a new composition comprising an antisense
CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC nucleic acids involved in bronchoconstriction, allergies, and/or
CC inflammation. The ON can have antiinflammatory, antiallergic,
CC antiaesthetic, cytosolic and analgesic activities. The compositions are
CC useful for the treatment of diseases associated with inflammation,
CC impaired airways, including lung disease and diseases whose secondary
CC effects afflict the lungs of a subject. They can be used for treating
CC e.g. ischemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC impeded respiration, respiratory distress syndrome, pain, cystic
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC pulmonary disease (COPD), and cancers such as leukemias, lymphomas,
CC carcinomas, and cancers which may metastasize to the lungs, including
CC breast and prostate cancer. The reduction of the adenosine content of the
CC ONs reduces side effects. The A-containing ONs break down with the
CC release of deoxyadenosine which activates adenosine receptors causing the
CC bronchoconstriction and inflammation. AAK32313 to AAK55312 represent the
CC nucleotide sequences given in the sequence listing from the present
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAK32323 to
CC AAK33992) are specifically claimed ONs from the present invention. N.B.
CC Sequences given in the disclosure of the present invention do not match
CC up with their corresponding SEQ ID NO: sequences given in the sequence
CC listing

SQ Sequence 22 BP; 0 A; 11 C; 0 G; 11 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.8; DB 1; Length 22;
Best Local Similarity 90.0%; Pred. No. 5.7e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1181 GAGAAAGAGAGAGAGAAA 1200
DB 22 GGGGAAAGAGAGAGAGAAA 3

RESULT 431
AAK20102/c
ID AAF20102 standard; DNA; 22 BP.
AC AAF20102;
XX
XX 14-MAR-2001 (first entry)
DT
XX
DB Human tumour necrosis factor alpha polynucleotide fragment #1669.
XX
XX Low adenosine antisense oligonucleotide; phosphothioate; allergy;
KW human; airway disorder; bronchoconstriction; lung inflammation;
KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW immunosuppressive; antiaesthetic; analgesic; hypotensive; cytosolic;
KW respiratory obstruction; pulmonary vasoconstriction; impeded respiration;
KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW cancer; ss.

XX Homo sapiens.
XX
XX WO200062736-A2.
XX
XX 26-OCT-2000.
XX
XX 24-MAR-2000; 2000WO-US008020.
XX

PR 06-APR-1999; 99US-0127958P.
 XX
 XX (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 XX NYce JW;
 XX
 XX WPI; 2000-679539/66.
 DR
 XX Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 XX
 PS Claim 14; Page 241, 1592pp; English.
 XX
 XX The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (i) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (i) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (i) can be used to down-regulate the
 CC expression and/or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensive, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impaired respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 CC
 XX
 SQ Sequence 22 BP; 0 A; 11 C; 0 G; 11 T; 0 U; 0 Other;
 Query Match 0.3%; Score 16.8; DB 1; Length 22;
 Best Local Similarity 90.0%; Pred. No. 5.7e+02;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1181 GAGAAAGAGAGAGAGAAA 1200
 Db 22 GCGGAGAGAGAGAGAGAAA 3
 RESULT 432
 ACC85488/c
 ID ACC85488 standard; DNA; 22 BP.
 XX
 AC ACC85488;
 XX
 DT 29-SEP-2003 (first entry)
 XX
 DE Human HEX-A gene PCR primer SEQ ID NO: 3.
 XX
 XX Late PCR; polymerase chain reaction; human; CFTR; HEX-A; limiting primer;
 KM excess primer; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PI WO2003054233-A1.
 XX

PD 03-JUL-2003.
 XX
 PF 19-DEC-2002; 2002WO-US040752.
 XX
 XX 19-DEC-2001; 2001US-0341886P.
 PR 17-DEC-2002; 2002US-00320893.
 XX
 XX (UYBR-) UNIV BRANDEIS.
 PA
 PI Wanch LJ, Pierce K, Hartshorn C, Rice J, Sanchez JA;
 XX
 XX WPI; 2003-569258/53.
 DR
 XX Non-symmetric polymerase chain reaction amplification, useful for
 PT amplifying DNA by thermally cycling a PCR reaction mixture containing a
 PT DNA amplification target sequence, a pair of PCR primers, dNTP's and
 PT thermostable polymerase.
 XX
 PS Example 1; Page 66; 125pp; English.
 XX
 XX The present invention relates to a method of non-symmetric polymerase
 CC chain reaction (PCR) amplification, comprising thermally cycling a PCR
 CC reaction mixture containing a DNA amplification target sequence, a pair
 CC of PCR primers, dNTP's and thermostable polymerase repeatedly through PCR
 CC steps of strand melting, primer annealing, and primer extension. The
 CC method is useful for amplifying stretches of DNA, including cDNA reverse
 CC transcribed from RNA, for assays, for diagnostics and other purposes. The
 CC present sequence is a primer used to demonstrate the method of the
 CC invention
 CC
 XX
 SQ Sequence 22 BP; 0 A; 11 C; 4 G; 7 T; 0 U; 0 Other;
 Query Match 0.3%; Score 16.8; DB 1; Length 22;
 Best Local Similarity 90.0%; Pred. No. 5.7e+02;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 909 CCAGGCTCAGAGAGAGG 928
 Db 21 CCAGGGGCGAGAGAGAGG 2
 RESULT 433
 ABZ95796/c
 ID ABZ95796 standard; DNA; 22 BP.
 XX
 AC ABZ95796;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human tumour necrosis factor antisense fragment no.1660.
 XX
 XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KM antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KM antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KM antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KM adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KM lung inflammation; respiratory disease; de.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 XX 24-APR-2001; 2001US-0286137P.
 PR
 XX (EPIC-) EPICGENESIS PHARM INC.
 PA
 PI NYce JW, Li Y, Sandrasagra A, Katz B, Pabalan J, Aguilar D;
 XX Miller S, Tang L, Shahabuddin S;
 XX

PS	Disclosure; SEQ ID NO 11038; 872bp; English.
XX	
XX	
CC	The invention relates to a novel pharmaceutical composition, which has a
CC	first active agent comprising an oligonucleotide antisense to the
CC	initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC	5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC	junctions of genes encoding a polypeptide associated with lung and/or
CC	nasal airway dysfunction and a second active agent comprising an
CC	antiinflammatory steroid and ubiquinone. A composition of the invention
CC	has antiinflammatory, antiallergic, antasthmatic, hypotensive,
CC	immunosuppressive, and cytostatic activity. The composition may have a
CC	use in antisense gene therapy. The composition is useful for treating or
CC	preventing a respiratory, lung or malignant disease or condition, also
CC	for enhancing the prophylactic or therapeutic respiratory effect of an
CC	antiinflammatory steroid in a subject, for reducing or depleting levels
CC	of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC	receptor, producing bronchodilation, increasing levels of ubiquinone or
CC	lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC	lung inflammation, lung allergies, or a respiratory disease or condition.
CC	Note: The sequence data for this patent is not represented in the printed
CC	specification, but was obtained in electronic format directly from WIPO
CC	at ftp.wipo.int/pub/published_pct_sequences
XX	
XX	
SQ	Sequence 22 BP; 0 A; 11 C; 0 G; 11 T; 0 U; 0 Other;
	Query Match 0.3%; Score 16.8; DB 1; Length 22;
	Best Local Similarity 90.0%; Pred. No. 5.7e+02;
	Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY	1181 GAGGAAGGAGAGAGAGAAA 1200
Db	22 GGGGAGAGGAGAGAGAGAAA 3
RESULT 434	
ABD19536/c	
ID	ABD19536 standard; DNA; 22 BP.
XX	
XX	ABD19536;
XX	
DT	29-JUL-2004 (first entry)
XX	
DE	Human tumour necrosis factor DNA fragment 1660.
XX	
KM	Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KM	respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KM	surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KM	analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KM	beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KM	respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KM	emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KM	pulmonary transplantation rejection; ds.
OS	
XX	Homo sapiens.
XX	
XX	WO200285309-A2.
PN	
PD	31-OCT-2002.
XX	
XX	
PF	23-APR-2002; 2002WO-US013143.
XX	
XX	
PR	24-APR-2001; 2001US-0286036P.
XX	
PA	(BPIG-) BPIGENESIS PHARM INC.
XX	
XX	
NY	Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI	Miller S, Tang L, Shahabuddin S;
XX	DR WPI; 2003-093058/08.
PT	Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted to nucleic acids associated with lung airway or lung dysfunction, and bronchodilating agent.
PS	Claim 15; SEQ ID NO 1103#; 763pp; English.
CC	This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC	The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier, and for use of the kit. The composition of the invention has anti-allergic, anti-inflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer.
CC	The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it
XX	Sequence 22 BP; 0 A; 11 C; 0 G; 11 T; 0 U; 0 Other;
QY	Query Match 0.3%; Score 16.8; DB 1; Length 22; Best Local Similarity 90.0%; Pred. No. 5.7e+02; Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
DB	1181 GAGGAAAGAGAGAGAGAAA 1200 22 GGCGAAGAGAGAGAGAAAA 3
RESULT 435	
ID AAA29753/c	AAA29753 standard; DNA; 23 BP.
XX AAA29753:	
AC	AAA29753:
DT	15-AUG-2000 (first entry)
XX	Synthetic oligonucleotide #1.
DE	
XX	Primer; destabilise non-specific duplex formation; PCR; detection;
KW	purification; sequencing; genetic marker; RACE; DNA synthesis; ss.
XX	Synthetic.
OS	
XX	
FT	Key Location/Qualifiers
PH	modified_base 8
TT	/+tag= a
TT	/mod_base= i
TT	/note= "inosine"

```

PT modified_base 18
PT /*tag= b
PT /mod_base= 1
PT /note="Inosine"
XX
XX WO200020630-A1.
XX
XX 13-APR-2000.
XX
XX 06-OCT-1999; 99WO-CA000933.
XX
XX 07-OCT-1998; 98CA-02246623.
XX
XX (UYMC-) UNIV MCGILL.
XX
XX Pelletier J, Das M,
XX
XX WPI; 2000-328943/28.
XX
PT Novel method of stabilizing duplex formation, or destabilizing non-
PT specific duplex formation using primer containing modified nucleotide
PT analogs, useful for preventing mispriming during PCR, RACE, DNA synthesis
PT or sequencing.
XX
XX Example 1; Page 25; 46pp; English.
XX
XX The present invention describes a method for destabilizing non-specific
XX duplex formation, between an oligonucleotide and a target nucleic acid
XX (NA), comprising incubating the target NA with a modified oligonucleotide
XX (1) comprising a homopolymeric sequence having a modification which
XX decreases or abrogates H-bonding between the modified oligonucleotide and
XX the non-specific target NA. The modified oligonucleotide is used to
XX improve discrimination between the targeted homopolymeric sequence and a
XX non-homopolymeric target sequence. It is used to increase the proportion
XX of full length cDNA clones for a library, to reduce mispriming during
XX sequencing, 5' or 3' RACE (rapid amplification of cDNA ends) or DNA
XX synthesis or to generate bona fide genetic markers. The present sequence
XX represents an oligonucleotide which is used in the exemplification of the
XX present invention
XX
XX Sequence 23 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 2 Other;
XX
XX
XX Query Match 0.3%; Score 16.8; DB 1; Length 23;
XX Best Local Similarity 81.8%; Pred. No. 5.7e+02;
XX Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX 5394 AAAAAATACAAAAAGAAAAA 5415
XX 23 AAAAAAAAAAAAAAAAAAAAAA 2
XX
XX
XX RESULT 436
XX AAC83384
XX ID AAC83384 standard; DNA; 24 BP.
XX
XX AAC83384;
XX
XX 26-FEB-2001 (first entry)
XX
XX Primer-CS (outer).
XX
XX Primer; virus; drug resistance; ss.
XX
XX Unidentified.
XX
XX WO200066774-A2.
XX
XX 09-NOV-2000.
XX
XX 28-APR-2000; 2000WO-GB001639.
XX
XX 28-APR-1999; 99GB-00009793.
XX
XX

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PA (GLAXO) GLAXO GROUP LTD.
XX
XX Blair ED, Robinson LH, Snowden BW, Tisdale SM;
XX
XX WPI; 2001-015986/02.
XX
XX Assay for detecting viruses resistant to anti-viral drugs by
XX PT recombination of DNA vector comprising a wild type virus strain genome
XX PT with a sequence of virus sample suspected of including drug-resistant
XX PT virus.
XX
XX Example 1; Page 13; 36pp; English.
XX
XX The present invention relates to detecting viruses resistant to anti-
XX viral drugs. The invention involves recombination of a DNA vector
XX encoding a modified virus with nucleotide sequences from virus samples
XX suspected of being drug-resistant, to produce recombinant viruses
XX
XX Sequence 24 BP; 8 A; 10 C; 6 G; 0 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.3%; Score 16.8; DB 1; Length 24;
XX Best Local Similarity 90.0%; Pred. No. 5.7e+02;
XX Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 1261 AGCTACAGCCGCCACCA 1280
XX 2 AGCCACAGCCGCCACCA 21
XX
XX
XX RESULT 437
XX ABQ82590/c
XX ID ABQ82590 standard; DNA; 24 BP.
XX
XX ABQ82590;
XX
XX 20-DEC-2002 (first entry)
XX
XX Human carbamylaspartic dehydrase 9.46 PCR primer 2 SEQ ID NO:4.
XX
XX Human; carbamylaspartic dehydrase 9.46; enzyme; malignant tumour;
XX KW haemopathy; HIV infection; immunological disease; inflammation;
XX KW PCR primer; ss.
XX
XX Homo sapiens.
XX
XX CN1352301-A.
XX
XX 05-JUN-2002.
XX
XX 02-NOV-2000; 2000CN-00127141.
XX
XX 02-NOV-2000; 2000CN-00127141.
XX
XX (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX
XX Mao Y, Xie Y;
XX
XX WPI; 2002-644473/70.
XX
XX New polypeptide-human carbamylaspartic dehydrase 9.46 and polynucleotide
XX encoding the polypeptide.
XX
XX Example 2; Page 16 (disclosure); 33pp; Chinese.
XX
XX The present invention describes human carbamylaspartic dehydrase 9.46
XX (1). Also described is a DNA recombination process used to produce (1).
XX (1) can be used in the treatment of various diseases, such as malignant
XX tumours, haemopathy, HIV infection, immunological diseases and various
XX CC inflammations. The present sequence represents a PCR primer for (1),
XX which is used in an example from the present invention
XX
XX Sequence 24 BP; 11 A; 1 C; 1 G; 11 T; 0 U; 0 Other;
XX

```

Query Match 0.3%; Score 16.8; DB 1; Length 24;
Best Local Similarity 90.0%; Pred. No. 5.7e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 5362 ATTAAAAATTTTACTTAA 5381
|||||
DB 21 ATTAAAAATTTTACTTAA 2

RESULT 438
AB079142/c
ID AB079142 standard; DNA; 24 BP.

AC AB079142;
XX
DT 15-NOV-2002 (first entry)

DE Primer #2 related to human eukaryotic initial factor -2 protein.

XX Human; eukaryotic initial factor -2; (elf-2); tumour; virus infection;
KM development disorder; PCR; primer; ss.
XX

OS Homo sapiens.

XX
PN CN1340547-A.

XX
PD 20-MAR-2002.

XX
PF 31-AUG-2000; 2000CN-00119830.

XX
PR 31-AUG-2000; 2000CN-00119830.

XX
PA (BODE-) BODE GENE DEV CO LTD SHANGHAI.

XX
PI Mao Y, Xie Y;

XX
DR WPI; 2002-436441/47.

XX
PT Polypeptide-human eukaryotic initiation factor-2 (elf-2)-associated
protein 74.14 and polynucleotide encoding it.

XX
PS Example 2; Page 18 (Disclosure); 36pp; Chinese.

XX This invention relates to a novel polypeptide-human eukaryotic initial
CC factor -2 (elf-2)-associated protein 74.14 and the application of the
CC polypeptide in treating diseases such as tumours, virus infection
CC abnormalities and development disorders. The present sequence represents
CC a primer related to the novel human eukaryotic initial factor -2 (elf-2)-
CC associated protein

XX
SQ Sequence 24 BP; 4 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.8; DB 1; Length 24;
Best Local Similarity 90.0%; Pred. No. 5.7e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5406 AAAGAAAAATGAAATTAA 5425
|||||
DB 20 AAATTAATAATTAATAATA 1

RESULT 439

ACC85493/c
ID ACC85493 standard; DNA; 24 BP.

XX
AC ACC85493;

XX
DT 29-SEP-2003 (first entry)

XX
DE Human CFTFR gene PCR primer SEQ ID NO: 8.

XX Late PCR; polymerase chain reaction; human; CFTFR, HEX-A; limiting primer;
KM excess primer; PCR; primer; ss.

XX Homo sapiens.
OS
XX
PN MO2003054233-A1.
XX
PD 03-JUL-2003.

XX
PF 19-DEC-2002; 2002WO-US040752.

XX
PR 19-DEC-2001; 2001US-0341886P.

XX
PR 17-DEC-2002; 2002US-00320893.

XX
PA (UYBR-) UNITV BRANDEIS.

XX
PI Wangh LJ, Pierce K, Hartshorn C, Rice J, Sanchez JA;

XX
DR WPI; 2003-569258/53.

XX
PT Non-symmetric polymerase chain reaction amplification, useful for
PT amplifying DNA by thermally cycling a PCR reaction mixture containing a
PT DNA amplification target sequence, a pair of PCR primers, dNTP's and
PT thermostable polymerase.

XX
PS Example 4; Page 72; 125pp; English.

XX The present invention relates to a method of non-symmetric polymerase
CC chain reaction (PCR) amplification, comprising thermally cycling a PCR
CC reaction mixture containing a DNA amplification target sequence, a pair
CC of PCR primers, dNTP's and thermostable polymerase repeatedly through PCR
CC steps of strand melting, primer annealing, and primer extension. The
CC method is useful for amplifying stretches of DNA, including cDNA reverse
CC transcribed from RNA, for assays, for diagnostics and other purposes. The
CC present sequence is a primer used to demonstrate the method of the
CC invention

XX
SQ Sequence 24 BP; 0 A; 13 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.8; DB 1; Length 24;
Best Local Similarity 90.0%; Pred. No. 5.7e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 909 CCAAGGCTCAGAGAGAGAGG 928
|||||
DB 23 CCAAGGCGCAGAGAGAGAGG 4

RESULT 440
ADG35077/c
ID ADG35077 standard; RNA; 23 BP.

XX
AC ADG35077;

XX
DT 26-FEB-2004 (first entry)

XX
DE Human TNF receptor siNA oligonucleotide SEQ ID NO:429.

XX RNA interference; short interfering nucleic acid; siNA;
KM short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KM short hairpin RNA; shRNA; expression modulation; gene therapy;
KM drug screening; diagnosis; therapeutic target identification;
KM pharmacogenomics; gene function analysis; gene mapping;
KM tumour necrosis factor receptor; TNF receptor; human; DNA-RNA hybrid; ss;
KM antibacterial; immunosuppressive; antirheumatic; antiarthritic; anti-HIV;
KM antiparasitic; antiinflammatory; septic shock; rheumatoid arthritis;
KM HIV/AIDS; psoriasis; inflammation; autoimmune disease; target sequence.

XX
OS Synthetic.

XX
OS Homo sapiens.

XX
PN MO2003070897-A2.

XX
PD 28-AUG-2003.

```
PF 20-FEB-2003; 2003WO-US004741.
XX
PR 20-FEB-2002; 2002US-0358580P.
XX
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-036782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 28-NOV-2002; 2002US-0429359P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L;
XX
DR WPI; 2003-697609/66.
XX
PT New short interfering nucleic acid, useful e.g. for treatment and
XX diagnosis of septic shock or rheumatoid arthritis, downregulates
XX expression of the tumor necrosis factor gene.
XX
PS Example 3; SEQ ID NO 429; 141bp; English.
XX
CC The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the human tumour necrosis factor (TNF)
XX receptor gene by RNA interference. The siNAs may or may not comprise
XX ribonucleotides and may be double or single stranded. They further
XX comprise sense and antisense regions, or alternatively are assembled from
XX a sense oligonucleotide and an antisense oligonucleotide. Specifically,
XX the siNA includes short interfering RNA (siRNA), double-stranded RNA,
XX micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be
XX modified or chemically modified, can contain deoxyribonucleotides, and
XX can be chemically synthesised, expressed from a vector or enzymatically
XX synthesised. The invention also relates to kits for the in vitro or in
XX vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors
XX that express siNA. The siNAs are used to modulate expression of the TNF
XX receptor gene in cells, tissue explants or organisms (e.g., by ex vivo
XX gene therapy), or in grafts and transplants for the treatment of a
XX variety of conditions. The TNF receptor siNAs have antibacterial,
XX immunosuppressive, antirheumatic, antiarthritis, anti-HIV, antiproliferic
XX and antiinflammatory activities. They may be used for treating septic
XX shock, rheumatoid arthritis, HIV/AIDS, psoriasis, inflammation and
XX autoimmune diseases. The siNAs are also useful for drug screening,
XX diagnosis, therapeutic target identification and validation, genetic
XX engineering, pharmacogenomics, studying gene function, and gene mapping
XX (e.g., of single nucleotide polymorphisms). The present sequence
XX represents a human TNF receptor transcript target sequence.
XX
SQ Sequence 23 BP; 4 A; 6 C; 4 G; 0 T; 9 U; 0 Other;
XX
Query Match 0.3%; Score 16.6; DB 1; Length 23;
Best Local Similarity 82.6%; Pred. No. 6.1e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 4317 CTGCTATCGAAGCCCTGAGAG 4339
DB 23 CTCGATTCGACGACTCGAAG 1
XX
RESULT 441
ADK97129/c
ID ADK97129 standard; DNA; 23 BP.
XX
AC ADK97129;
XX
DT 06-MAY-2004 (first entry)
XX
DE Primer of the invention #2849.
XX
KW human; single nucleotide polymorphism; SNP; ss; primer.
XX
OS Synthetic.
XX
```

```
PN JP2003259875-A.
XX
XX 16-SEP-2003.
XX
PD 08-MAR-2002; 2002JP-00064373.
XX
PF 08-MAR-2002; 2002JP-00064373.
XX
PR 08-MAR-2002; 2002JP-00064373.
XX
XX (KAGA-) KAGAKU GIYUTSU SHINKO JIGYODAN.
XX
PA WPI; 2004-093977/10.
XX
DR
XX
XX Novel polynucleotide useful for PCR amplification along with two DNA
XX fragment from another set of sequences, or for detecting single
XX nucleotide polymorphism in human gene.
XX
PS Claim 2; SEQ ID NO 6158; 2627bp; Japanese.
XX
CC The present invention relates to a polynucleotide isolated from a human
XX gene and is useful for detecting a single nucleotide polymorphism in a
XX human gene or for diagnosing of disease. The invention enables the
XX detection of a single nucleotide polymorphism in a human gene. The
XX present sequence represents a primer of the invention.
XX
SQ Sequence 23 BP; 7 A; 4 C; 9 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 16.6; DB 1; Length 23;
Best Local Similarity 82.6%; Pred. No. 6.1e+02;
Matches 19; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 2662 CACTCTCGAGATCCTCCACTG 2684
DB 23 CTCGCTCGACGACTCCACTG 1
XX
RESULT 442
AAV21969/c
ID AAV21969 standard; DNA; 18 BP.
XX
AC AAV21969;
XX
DT 14-JUL-1998 (first entry)
XX
DE Nuclease resistant antisense oligo NBT 142 targeted against (TC)9.
XX
KW Nuclease resistant; bacterial infection; antibiotic; target;
XX veterinary medicine; treatment; human; industrial process;
XX bacterial control; ss.
XX
OS Synthetic.
XX
XX
XX WO9803533-A1.
XX
PD 29-JAN-1998.
XX
PF 23-JUL-1997; 97WO-US012961.
XX
PR 24-JUL-1996; 96US-00685575.
XX
XX (OLIG-) OLIGOS ETC & OLIGOS THERAPEUTICS INC.
XX
PA Arrow A, Dale RMX, Thompson TL;
XX
PI WPI; 1998-120687/11.
XX
DR
XX
XX Treating bacterial infections in humans or animals with
XX oligo:nucleotide(s) - resistant to nuclease and targeted to bacterial
XX nucleic acid or proteins, also conjugates of these oligo:nucleotide(s)
XX with antibiotics.
XX
PS Claim 49; Page 87; 163pp; English.
XX
XX This antisense oligonucleotide is nuclease resistant and can be used in
```

CC the treatment of animals, including humans, having a bacterial infection.
 CC The treatment comprises administration of such nuclease resistant
 CC oligonucleotides, targeted to a nucleic acid or protein of the bacterium,
 CC and formulated with a carrier. A compound comprising this nuclease
 CC resistant oligonucleotide can be covalently linked to an antibiotic. The
 CC method is used to treat infections by a wide variety of Gram-positive and
 CC Gram-negative, or acid-fast, bacteria, in human and veterinary medicine.
 CC The methods are particularly used in immuno-compromised individuals (e.g.
 CC patients with acquired immunodeficiency syndrome or those receiving
 CC chemotherapy or radiation therapy), optionally in combination with, or
 CC fused to, antiviral or other antimicrobial oligonucleotides. Apart from
 CC therapeutic use, the oligonucleotides can be used to control bacteria in
 CC laboratory cultures, foods, beverages and industrial processes. The
 CC oligonucleotides are specific for bacteria, without affecting metabolism
 CC in mammalian cells. They may also activate RNase H and have a general,
 CC non-specific immune-stimulating effect. The oligonucleotides can be
 CC administered orally, intranasally, rectally, topically or by injection,
 CC optionally coupled to an agent (e.g. carbohydrate or polyamine) that
 CC enhances cellular uptake

XX
 XX
 SQ Sequence 18 BP; 0 A; 9 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 6.3e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1181 GAGAAAGAGAGAGAGA 1198
 DB 18 GAGAGAGAGAGAGAGAGA 1

RESULT 443
 AAX91065/C
 ID AAX91065 standard; RNA; 18 BP.
 XX
 XX AAX91065;
 XX
 DT 15-NOV-1999 (first entry)
 XX
 DE CAT gene target RNA fragment.
 XX
 KM Phosphonate internucleosidyl linkage; chirality; hybridization; racemic;
 KM binding affinity; ss.
 XX
 OS Synthetic.
 XX
 PN US5955597-A.
 PD 21-SEP-1999.
 XX
 PF 30-JUN-1997; 97US-00885126.
 XX
 PR 16-NOV-1993; 93US-00154013.
 PR 21-NOV-1994; 94US-00343018.
 XX
 PA (GENT-) GENTA INC.
 PI
 PI Schwartz DA, Vaghefi MM, Riley TA, Arnold LJ, Reynolds MA;
 DR WPI, 1999-539600/45.
 XX
 PT Oligomers made using chirally pure nucleoside dimers, trimers, or
 PT tetramers with enhanced binding affinities.
 XX
 PS Example 19; Col 41-42; 30pp; English.
 XX
 CC The invention provides methods for preparing oligomers having phosphonate
 CC internucleosidyl linkages of a preselected chirality which hybridize to a
 CC target RNA sequence. The method of making comprises: (a) synthesizing a
 CC nucleoside dimer, trimer, or tetramer with racemic internucleosidyl
 CC phosphonate linkages; (b) purifying the racemic nucleoside to a chirally
 CC pure nucleoside; and (c) sequentially linking at least 2 of the chirally
 CC pure nucleosides to form a synthetic oligomer that is enriched for

CC phosphonate internucleosidyl linkages of a preselected chirality and is
 CC complementary to an RNA target sequence. The methods are useful for
 CC providing chirally enriched synthetic oligomers. Rp chirally enriched
 CC synthetic oligomers have enhanced binding affinities for RNA compared to
 CC oligomers with racemic all methylphosphonate internucleosidyl linkages.
 CC Sequences AAX91054-75 represent oligomers chemically synthesised using
 CC the method of the invention

XX
 XX
 SQ Sequence 18 BP; 0 A; 9 C; 0 G; 9 T; 9 U; 0 Other;

Query Match 0.3%; Score 16.4; DB 1; Length 18;
 Best Local Similarity 94.4%; Pred. No. 6.3e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1180 AGAGAAAGAGAGAGAGAG 1197
 DB 18 AGAGAGAGAGAGAGAGAG 1

RESULT 444
 ADH70321
 ID ADH70321 standard; DNA; 18 BP.
 XX
 XX ADH70321;
 XX
 DT 25-MAR-2004 (first entry)
 XX
 DE Human Vbeta gene repeat sequence #11.
 XX
 XX
 KM human, T-cell associated disease; Vbeta; autoimmune disease;
 KM degenerative nervous system disease; graft versus host disease;
 KM hypersensitivity disease; infectious disease; neoplastic disease;
 KM Addison's disease; atrophic gastritis;
 KM degenerative nervous system disease; multiple sclerosis;
 KM Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
 KM allergy; type II hypersensitivity; Goodpasture's syndrome;
 KM type IV hypersensitivity; leprosy; infectious disease; viral infection;
 KM HIV; fungal infection; Candida; parasitic infection; schistosomiasis;
 KM filaria; bacterial infection; Mycobacterium; neoplastic disease;
 KM lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
 KM breast cancer; ds.
 XX
 XX
 OS Homo sapiens.
 XX
 PN US2002150891-A1.
 PD 17-OCT-2002.
 XX
 PF 05-MAR-1999; 99US-00263959.
 XX
 PR 19-SEP-1994; 94US-00309335.
 PR 19-SEP-1995; 95US-00531241.
 XX
 PA (HOOD/) HOOD L E.
 PA (ROME/) ROWEN L.
 XX
 PI
 PI Hood LE, Rowen L;
 DR WPI, 2004-059052/06.
 XX
 PT Kit for diagnosing and treating T-cell associated diseases e.g.
 PT autoimmune, degenerative nervous system and infectious disease, comprises
 PT nucleic acid primers specifically priming and allowing amplification of a
 PT Vbeta gene.
 XX
 PS Disclosure; SEQ ID NO 515; 16pp; English.
 XX
 CC The invention relates to a kit for diagnosing and treating T-cell
 CC associated diseases which comprises a panel of nucleic acid primers
 CC specifically priming and allowing amplification of each Vbeta gene,
 CC VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
 CC rejection and diagnosing and treating T-cell associated diseases
 CC including autoimmune diseases, degenerative nervous system diseases,

CC graft versus host disease, hypersensitivity diseases, infectious diseases
CC and neoplastic diseases. Autoimmune diseases include Addison's disease,
CC atrophic gastritis. Degenerative nervous system diseases include multiple
CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
CC I hypersensitivities such as contact with allergens that lead to
CC allergies, Type II hypersensitivities such as those present in
CC Goodpasture's syndrome and Type IV hypersensitivities such as those
CC manifested in leprosy. Infectious diseases include viral infections
CC caused by viruses such as HIV, fungal infections such as those caused by
CC the yeast genus *Candida*, parasitic infections such as those caused by
CC schistosomes, filaria and bacterial infections such as those caused by
CC *Mycobacterium*. Neoplastic diseases include lymphoproliferative diseases
CC such as leukemias, lymphomas and cancers such as cancer of the brain,
CC breast. The present sequence represents a Vbeta gene repeat sequence.

SQ Sequence 18 BP; 9 A; 0 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 6.3e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1180 AGAGAAAGAGAGAGAG 1197
DB 1 AGAGAGAGAGAGAGAGAG 18

RESULT 445
ADH70679
ID ADH70679 standard; DNA; 18 BP.
XX
AC ADH70679;
XX
DT 25-MAR-2004 (first entry)
DE Human Vbeta gene repeat sequence #469.
XX
XX human; T-cell associated disease; Vbeta; autoimmune disease;
KM degenerative nervous system disease; graft versus host disease;
KM hypersensitivity disease; infectious disease; neoplastic disease;
KM Addison's disease; atrophic gastritis;
KM degenerative nervous system disease; multiple sclerosis;
KM Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
KM allergy; type II hypersensitivity; Goodpasture's syndrome;
KM type IV hypersensitivity; leprosy; infectious disease; viral infection;
KM HIV; fungal infection; *Candida*; parasitic infection; schistosome;
KM filaria; bacterial infection; *Mycobacterium*; neoplastic disease;
KM lymphoproliferative disease; leukemia; lymphoma; cancer; brain cancer;
KM breast cancer; ds.
XX
OS Homo sapiens.
XX
PN US2002150891-A1.
XX
PD 17-OCT-2002.
XX
PF 05-MAR-1999; 99US-00263959.
XX
PR 19-SBP-1994; 94US-00309335.
PR 19-SBP-1995; 95US-00531241.
XX
PA (HOOD/) HOOD L E.
PA (ROME/) ROMEN L.
XX
PI Hood LE, Rowen L;
XX
DR WPI, 2004-059052/06.
XX
XX Kit for diagnosing and treating T-cell associated diseases e.g.
PT autoimmune, degenerative nervous system and infectious disease, comprises
PT nucleic acid primers specifically priming and allowing amplification of a
PT Vbeta gene.
XX
XX Disclosure; SEQ ID NO 873; 164pp; English.

XX
CC The invention relates to a kit for diagnosing and treating T-cell
CC associated diseases which comprises a panel of nucleic acid primers
CC specifically priming and allowing amplification of each Vbeta gene,
CC Vbetacta or cDNA. The kit is useful for diagnosing organ transplant
CC rejection and diagnosing and treating T-cell associated diseases
CC including autoimmune disease, degenerative nervous system diseases,
CC graft versus host disease, hypersensitivity diseases, infectious diseases
CC and neoplastic diseases. Autoimmune diseases include Addison's disease,
CC atrophic gastritis. Degenerative nervous system diseases include multiple
CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
CC I hypersensitivities such as contact with allergens that lead to
CC allergies, Type II hypersensitivities such as those present in
CC Goodpasture's syndrome and Type IV hypersensitivities such as those
CC manifested in leprosy. Infectious diseases include viral infections
CC caused by viruses such as HIV, fungal infections such as those caused by
CC the yeast genus *Candida*, parasitic infections such as those caused by
CC schistosomes, filaria and bacterial infections such as those caused by
CC *Mycobacterium*. Neoplastic diseases include lymphoproliferative diseases
CC such as leukemias, lymphomas and cancers such as cancer of the brain,
CC breast. The present sequence represents a Vbeta gene repeat sequence.

SQ Sequence 18 BP; 9 A; 0 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 6.3e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1181 GAGAAAGAGAGAGAGA 1198
DB 1 GAGAGAGAGAGAGAGAGA 18

RESULT 446
AAV30490
ID AAV30490 standard; DNA; 19 BP.
XX
AC AAV30490;
XX
DT 14-OCT-1998 (first entry)
DE Canine beta-3 adrenergic receptor sense primer R128.
XX
XX Canine; beta-adrenergic receptor; brown adipose tissue; probe; human;
KM hybridisation; ligand; primer; ss.
XX
OS Synthetic.
OS Canis familiaris.
XX
PN WO9735973-A2.
XX
PD 02-OCT-1997.
XX
PF 26-MAR-1997; 97MO-FR000537.
XX
PR 26-MAR-1996; 96FR-00003730.
XX
PA (VETI-) VETIGEN.
XX
PI Lenzen G, Pietri-Rouxel F, Drumare M, Strosberg AD;
XX
DR WPI, 1998-032136/03.
XX
XX Canine beta 2 and beta 3 adrenergic receptors and coding sequences -
PT useful for identifying specific ligands and (ant)agonists to develop
PT specific treatments for obesity in dogs.
XX
XX Claim 17, Page 52; 79pp; French.
XX
XX Primers AAV30470-V30490 were used for sequencing the coding region of the
CC canine beta 3-adrenergic receptor (RA-Ca-b3) gene (AAV30469). RA-Ca-b3
CC has been implicated in obesity and obesity-related metabolic disorders
CC e.g. diabetes. The canine version of RA-Ca-b3 can be used to develop

CC treatments specific for dogs. The sequence can also be used in
 CC differential screening for ligands for RA-Ca-b3 as compared to the beta-2
 CC adrenergic receptor (AAW44932)
 XX
 SQ Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
 QY Query Match 0.3%; Score 16.4; DB 1; Length 19;
 Best Local Similarity 94.4%; Pred. No. 6.3e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Db 4801 CTCAGCAGCTGAAGTATC 4818
 2 CTCAGCAGCTGAAGTATC 19
 RESULT 447
 AAH45567/c
 ID AAH45567 standard; DNA; 19 BP.
 XX
 AC AAH45567;
 XX
 DT 13-SEP-2001 (first entry)
 XX
 DE PCR primer related to peroxidase encoding DNA.
 XX
 KW Peroxidase; active oxygen resistance; transgenic plant; PCR primer;
 KW environmental stress; ss.
 XX
 OS Synthetic.
 OS
 PN JP2001095585-A.
 XX
 PD 10-APR-2001.
 XX
 PF 30-SEP-1999; 99QP-00279690.
 XX
 PR 30-SEP-1999; 99JP-00279690.
 XX
 PA (TOYOT) TOYOTA JIDOSHA KK.
 XX
 DR WPI; 2001-360494/38.
 XX
 PT Peroxidase derived from Paraquat-resistant callus, and gene encoding it,
 PT used for the development of plants resistant to active oxygen formed
 PT under environmental stress.
 XX
 PS Example 4; Page 20; 23pp; Japanese.
 XX
 CC This invention relates to a peroxidase derived from a Paraquat resistant
 CC callus. Included in the invention are the gene encoding the peroxidase, a
 CC vector containing the gene, and a method for the preparation of the
 CC peroxidase. The gene is useful for the development of a plant highly
 CC resistant against active oxygen which is formed under various
 CC environmental stress conditions. This sequence represents a PCR primer
 CC used in the isolation of peroxidase related DNA fragment
 XX
 SQ Sequence 19 BP; 4 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
 QY Query Match 0.3%; Score 16.4; DB 1; Length 19;
 Best Local Similarity 94.4%; Pred. No. 6.3e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Db 4541 AGTATCGAGCGAGCTGA 4558
 18 AGTTTCGAGCGAGCTGA 1
 RESULT 448
 ABA82228/c
 ID ABA82228 standard; DNA; 19 BP.
 XX
 AC ABA82228;
 XX

DT 25-JAN-2002 (first entry)
 DE
 DB Zmax1 gene region physical map preparation STS marker #187.
 XX
 KW Human; high bone mass; HBM gene; Zmax1 gene; chromosome 11; 11q13.3;
 KW sequence tagged site; STS; osteoporosis; osteopethic; gene therapy;
 KW antineuse therapy; vaccine; bone disorder; Paget's disease; adapter;
 KW sclerostosis; osteomalacia; fibrous dysplasia; PCR primer; linker; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 OS
 PN WO200177327-A1.
 XX
 PD 18-OCT-2001.
 XX
 PF 21-JUN-2000; 2000WO-US016951.
 XX
 PR 05-APR-2000; 2000US-00543771.
 XX
 PR 05-APR-2000; 2000US-00544398.
 XX
 PA (GENO-) GENOME THERAPEUTICS CORP.
 XX
 PI Carulli JP, Little RD, Recker RR, Johnson ML;
 XX
 DR WPI; 2001-657171/75.
 XX
 PT New high bone mass (HBM) and Zmax1 genes and proteins useful for
 PT modulating bone mass for the treatment of e.g. osteoporosis.
 XX
 PS Disclosure; Page 34; 443pp; English.
 XX
 CC The present invention describes the human Zmax1 gene and the high bone
 CC mass (HBM) gene, which are found on chromosome 11q13.3. The Zmax1 and HBM
 CC genes have osteopathic activities. The genes can be used in gene therapy,
 CC antisense therapy and in the production of vaccines. They can be used in
 CC the diagnosis and treatment of bone disorders including osteoporosis,
 CC Paget's disease, sclerostosis, osteomalacia and fibrous dysplasia.
 CC ABA82038 to ABA82700 and AAG68168 to AAG68193 represent sequences used in
 CC the exemplification of the present invention
 XX
 SQ Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
 QY Query Match 0.3%; Score 16.4; DB 1; Length 19;
 Best Local Similarity 94.4%; Pred. No. 6.3e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Db 3924 GTTCTGGGTGAGATCAA 3941
 19 GTTCTGGGTGAGATCAA 2
 RESULT 449
 ABAK23025/c
 ID ABAK23025 standard; DNA; 19 BP.
 XX
 AC ABAK23025;
 XX
 DT 09-APR-2002 (first entry)
 XX
 DE Human Zmax1 cDNA forward PCR primer #94.
 XX
 KW Human; mouse; Zmax1; HBM; high bone mass gene; lipid regulation; stroke;
 KW lipid-associated condition; arteriosclerosis; cardiovascular disease; ss;
 KW osteoporosis; atherosclerosis; diabetic atherosclerosis; plaque build-up;
 KW neurovascular condition; wound healing; gene therapy; PCR primer; probe;
 KW bone development disorder; antiarteriosclerotic; cardiovascular;
 KW osteopathic; cerebroprotective.
 XX
 OS Homo sapiens.
 OS
 PN WO200192891-A2.
 XX

PD 06-DEC-2001.
XX 25-MAY-2001; 2001MO-US016946.
XX 26-MAY-2000; 2000US-00578900.
XX (GENO-) GENOME THERAPEUTICS CORP.
PA (UYCR-) UNIV CREIGHTON SCHOOL MEDICINE.
PI Carulli JP, Little RD, Recker RR, Johnson ML;
XX WPI; 2002-097784/13.
XX Identifying molecules involved in lipid regulation, useful for
PT diagnosing, treating or preventing e.g., arteriosclerosis, comprises
PT identifying a molecule that binds to high bone mass gene or its
PT corresponding wild type gene.
XX Disclosure; Page 39; 409pp; English.
XX The invention relates to a method for identifying a molecule involved in
CC lipid regulation comprising identifying a molecule that binds to or
CC inhibits binding of a molecule to high bone mass (HBM) or its wild type
CC gene, Zmaxi. Compounds identified by the method are useful for treating,
CC diagnosing, preventing or screening for normal and abnormal lipid-
CC associated conditions, including arteriosclerosis, cardiovascular
CC disease, stroke, and osteoporosis. The compounds may also be used in the
CC treatment or prevention of diabetic atherosclerosis, neurovascular
CC conditions caused by plaque build-up, poor circulation due to plaque
CC build-up and associated poor wound healing. The methods may be used in
CC gene therapy, pharmaceutical development, and diagnostic assays for bone
CC development disorders. Molecules identified by comparison of Zmaxi and
CC HBM systems can be used as surrogate markers in pharmaceutical
CC development, in diagnosis of human or animal bone disease, and in the
CC treatment of bone diseases. Sequences ABK22776-ABK23411 represent CDNA
CC molecules encoding human Zmaxi and HBM, and PCR primers, probes, linkers
CC and adapters of the invention
XX
SQ Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.3%; Score 16.4; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 6.3e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3924 GTTCTGGGTGAGATCAA 3941
DB 19 GTTCTGGGTGAGATCAA 2
RESULT 450
ACCA5608/c
ID ACCA5608 standard; DNA; 19 BP.
XX
AC ACCA5608;
XX
DT 02-JUN-2003 (first entry)
XX
DE Human HBM STS marker forward primer #94.
XX
XX Human; high bone mass; HBM; LRP5; LRP6; transgenic; bone mass modulation;
XX Gene therapy; bone density modulation; bone strength; trabecular number;
XX bone size; bone tissue connectivity; bone disease; osteoporosis; PCR;
XX osteomalacia; rickets; Paget's disease; neoplasm of the bone; primer; ss.
XX
XX Homo sapiens.
XX
XX WO200292764-A2.
XX
XX 21-NOV-2002.
XX
XX 13-MAY-2002; 2002MO-US014876.
XX
XX 11-MAY-2001; 2001US-0290071P.

PR 17-MAY-2001; 2001US-0291311P.
PR 01-FEB-2002; 2002US-035058P.
PR 04-MAR-2002; 2002US-0361293P.
XX
XX (GENO-) GENOME THERAPEUTICS CORP.
PA (AMRP) WYETH.
PI Babl J, Bex FJ, Yaworsky PJ, Bodine FV;
XX WPI; 2003-129278/12.
XX
XX New transgenic animals (e.g. mice), useful as models for studying bone
PT density modulation, developing drugs for treating or preventing bone
PT diseases (e.g. osteoporosis), or diagnosing diseases characterized by
PT reduced bone density.
XX Disclosure; Page 55; 603pp; English.
XX The invention relates to novel transgenic animals expressing the high
CC bone mass (HBM) gene, expressing the corresponding wild type HBM gene,
CC comprising an alteration of the gene encoding LRP5 or LRP6, or expressing
CC an LRP5 that is modulated by an altered gene control sequence introduced
CC for homologous or non-homologous recombination. The transgenic animals are
CC for the study of bone density modulation or bone mass modulation. The
CC invention has osteopathic and cytostatic activity. The polynucleotides of
CC the invention may have a use in gene therapy. The transgenic animals and
CC nucleic acids are for the study of bone density modulation, where the
CC bone mass is modulated relative to non-transgenic animals of the same
CC species in more than one parameter selected from bone density, bone
CC strength, trabecular number, bone size, or bone tissue connectivity. The
CC transgenic animals, nucleic acids and methods are useful for identifying
CC molecules involved in bone development, and for developing pharmaceutical
CC compositions, which may be employed for treating or preventing bone
CC diseases, e.g. osteoporosis, osteomalacia, rickets, Paget's disease, or
CC neoplasms of the bone. The transgenic animals and nucleic acids are also
CC useful in methods for diagnosing diseases involved in bone development,
CC or characterised by reduced bone density or mass. The present sequence is
CC used in the exemplification of the invention
XX
SQ Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.3%; Score 16.4; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 6.3e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3924 GTTCTGGGTGAGATCAA 3941
DB 19 GTTCTGGGTGAGATCAA 2
RESULT 451
AB222886
ID AB222886 standard; DNA; 19 BP.
XX
AC AB222886;
XX
DT 07-APR-2003 (first entry)
XX
DE Oligonucleotide kn2.
XX
XX Phosphorothioate; locked nucleic acid; LNA; immunostimulatory;
XX cytostatic; antimicrobial; gene therapy; pathogenic infection; cancer;
XX ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "5'-terminally modified by fluorescein"
XX
XX WO2002102825-A2.

```
XX 27-DEC-2002.
PD
XX
XX 14-JUN-2002; 2002MO-GB002728.
PF
XX
XX 15-JUN-2001; 2001GB-00014719.
PR
XX
XX (GLAXO ) GLAXO GROUP LTD.
PA
XX
XX Catchpole IR;
PI
XX
XX MPI; 2003-157022/15.
DR
XX
XX Novel locked nucleic acid conjugate useful in manufacturing a medicament
PT for treating or preventing pathogenic infections or cancer, has an
PT oligonucleotide having locked nucleic acid based on a functional moiety.
XX
XX
XX Example 5; Page 36; 101pp; English.
PS
XX
XX The present invention describes a locked nucleic acid (LNA) conjugate (I)
CC comprising an oligonucleotide having at least one locked nucleic acid
CC based on a functional moiety. Also described: (1) a complex (II)
CC comprising (I) and a DNA sequence having a complementary sequence to the
CC oligonucleotide, and encoding a gene under the control of a promoter; (2)
CC a pharmaceutical composition (III) comprising (II) and a carrier or
CC diluent; (3) a device loaded with (III); and (4) an oligonucleotide (IV)
CC comprising a first region comprising an oligonucleotide sequence having
CC at least one LNA, and a second region comprising an immunostimulatory
CC oligonucleotide region containing at least one unmethylated CG di-
CC nucleotide motif. (I) has cytostatic and antimicrobial activities, and in
CC can be used in gene therapy. (I) and (II) can be used in medicine, and in
CC the manufacture of a medicament for the treatment or the prevention of
CC pathogenic infections or cancer. (I) is useful for the preparation of
CC (III), by hybridising (I) with a plasmid capable of expressing a gene
CC encoding an antigen or therapeutic protein, and formulating the resulting
CC complex with a pharmaceutical carrier. The present sequence represents an
CC oligonucleotide, which is used in an example from the present invention
XX
XX
XX Sequence 19 BP; 9 A; 0 C; 10 G; 0 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.3%; Score 16.4; DB 1; Length 19;
XX Best Local Similarity 94.4%; Pred. No.6.3e+02;
XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 1181 GAGAAAGAGAGAGAGA 1198
QY |||||
DB 1 GAGAGAGAGAGAGAGA 18
XX
XX RESULT 452
XX ADB98306/c
XX ID ADB98306 standard; DNA; 19 BP.
XX
XX ADB98306;
XX
XX 04-DEC-2003 (first entry)
DT
XX
XX Sequence tagged site #187 used to prepare Zmax1 (LRP5) gene region map.
DE
XX
XX Osteopathic; Gene therapy; High Bone Mass; HBM; LRP5; Zmax1; LRP6;
KW bone mass modulation; osteoporosis; STS; sequence tagged site; ds.
XX
XX Homo sapiens.
OS
XX
XX MO200292000-A2.
PN
XX
XX 21-NOV-2002.
PD
XX
XX 13-MAY-2002; 2002MO-US014877.
PF
XX
XX 11-MAY-2001; 2001US-0290071P.
PR 17-MAY-2001; 2001US-0291311P.
PR 01-FEB-2002; 2002US-0353058P.
PR
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```
PR 04-MAR-2002; 2002US-0361293P.
XX
XX (GENO-) GENOME THERAPEUTICS CORP.
PA (AMHP ) WYETH.
XX
XX Allen K, Anisiewicz A, Graham JR, Morales A, Yaworsky PJ, Liu W;
PI MPI; 2003-129214/12.
DR
XX
XX New nucleic acid comprising a mutation in LRP5 or LRP6, useful for
PT diagnosing a HBM-like phenotype in a subject and for preparing a
PT composition for modulating bone mass and/or lipid levels in a subject
PT suffering from e.g. osteoporosis.
XX
XX Example 2; Page 62; 629pp; English.
PS
XX
XX The present invention relates to High Bone Mass (HBM), LRP5 (Zmax1) and
CC LRP6 mutants, which results in a HBM-like phenotype when expressed in a
CC cell. The HBM-like phenotype results in bone mass modulation and/or lipid
CC level modulation. The invention is useful for diagnosing a HBM-like
CC phenotype in a subject and for preparing a composition for modulating
CC bone mass and/or lipid levels in a subject suffering from e.g.
CC osteoporosis. The present sequence is a Sequence Tagged Site (STS)
CC marker, which was used to prepare a physical map of the Zmax1 (LRP5) gene
CC region.
XX
XX
XX Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.3%; Score 16.4; DB 1; Length 19;
XX Best Local Similarity 94.4%; Pred. No.6.3e+02;
XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 3924 GTTCTGGGTGAGATCAA 3941
QY |||||
DB 19 GTTCTGGGCGAGATCAA 2
XX
XX RESULT 453
XX AAX95521
XX ID AAX95521 standard; DNA; 20 BP.
XX
XX AAX95521;
XX
XX 13-SEP-1999 (first entry)
DT
XX
XX PCR primer used to amplify an ORF of Chlamydia pneumoniae.
DE
XX
XX Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KW neutralising epitope; PCR primer; ss.
XX
XX Synthetic.
OS
XX Chlamydia pneumoniae.
XX
XX MO9927105-A2.
PN
XX
XX 03-JUN-1999.
PD
XX
XX 20-NOV-1998; 98WO-1B001890.
PF
XX
XX 21-NOV-1997; 97FR-00014673.
PR 04-NOV-1998; 98US-0107078P.
XX
XX (GENT ) GENSET.
PA
XX
XX Griffiths R;
PI
XX
XX MPI; 1999-357842/30.
DR
XX
XX Genome sequence of Chlamydia pneumoniae.
PT
XX
XX Page 1754; Disclosure; 1912pp; English.
PS
```

CC AAX91991-X97517 represent PCR primers used to amplify open reading frames
 CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
 CC (see AAX91990). C. pneumoniae causes respiratory disease such as
 CC pneumonia and bronchitis and is thought to be a contributing factor in
 CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
 CC nodosum or pharyngitis. The polypeptides encoded by the open reading
 CC frames of the C. pneumoniae genome (see AAX94584-AAX95879) can be used
 CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
 CC nucleotide sequences can also be used as immunogenic compositions,
 CC especially where the vector directs the expression of a neutralising
 CC epitope of C. pneumoniae
 CC
 SQ Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 6.4e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1620 CTTGAGCTGCGAGAGCT 1637
 DB 2 CTTGATCTGCGAGAGCT 19
 RESULT 454
 AAX77767/c
 ID AAX77767 standard; DNA; 20 BP.
 AC AAX77767;
 XX
 DT 13-NOV-2001 (first entry)
 XX
 DE PCR primer for human thrombospondin 1-like protein cDNA.
 XX
 KW Thrombospondin 1-like protein; TSP1-like protein; vesicle transport;
 KM brain tumour; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200109321-A1.
 PD 08-FEB-2001.
 XX
 PF 28-JUL-2000; 2000WO-JP005068.
 XX
 PR 29-JUL-1999; 99JP-00248036.
 PR 27-AUG-1999; 99US-00300253.
 PR 18-OCT-1999; 99US-0159590P.
 PR 11-JAN-2000; 2000JP-00118776.
 PR 17-FEB-2000; 2000US-0183322P.
 PR 02-MAY-2000; 2000JP-00183767.
 XX
 PA (HELI-) HELIX RES INST.
 XX
 PI Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
 PI Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T, Murakami K;
 PI Yano K, Kanazaki K, Inoue Y;
 XX
 DR WPI, 2001-541222/60.
 XX
 PT Gene encoding thrombospondin-like protein, and the protein and antibodies
 PT to it, useful for diagnosis and treatment of brain tumors.
 XX
 PS Example 10; Page 34; 105pp; Japanese.
 XX
 XX PCR primers AAX77766-67 were used to amplify a cDNA fragment encoding a
 CC thrombospondin 1-like (TSP1-like) protein. The cDNA sequence encoding
 CC human TSP1-like protein was isolated from a human 10 week-aged foetal
 CC tissue cDNA library. The TSP1-like protein may be involved in
 CC intracellular vesicle transport. Secretion of the TSP1-like protein is
 CC reduced in brain tumours. It can be used in the screening of target
 CC compounds, and is useful for diagnosis, prediction and treatment of brain
 CC tumour
 CC

SQ Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 6.4e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2376 CTTGAGCTTCATTCACCT 2393
 DB 20 CTTGAGCTTCATTCACCT 3
 RESULT 455
 AEN99718/c
 ID AEN99718 standard; DNA; 20 BP.
 AC AEN99718;
 XX
 DT 16-AUG-2002 (first entry)
 XX
 DE Human clusterin inhibiting antisense oligonucleotide 52.
 XX
 KW Human; antisense inhibition; antisense oligonucleotide; clusterin;
 KM hypercholesterolaemia; cardiovascular disorder; ss;
 KM hyperproliferative disorder; hyperlipidemic disorder;
 KM phosphorothioate backbone; 2'-O-methoxyethyl wing.
 XX
 OS Homo sapiens.
 XX
 PN WO200222635-A1.
 PD 21-MAR-2002.
 XX
 PF 10-SEP-2001; 2001WO-US028235.
 XX
 PR 11-SEP-2000; 2000US-00659791.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Monia BP, Freiler SM;
 XX
 DR WPI, 2002-404805/43.
 XX
 PT Novel antisense compound targeted to nucleic acid molecule encoding
 PT clusterin, useful for treating animal having disease associated with
 PT clusterin such as hyperlipidemic disorder, cardiovascular disorder.
 XX
 PS Claim 3; Page 84; 125pp; English.
 XX
 CC The invention comprises antisense oligonucleotides that are capable of
 CC inhibiting expression of the human clusterin gene. The antisense
 CC oligonucleotides of the invention are useful for inhibiting the
 CC expression of clusterin in cells. The antisense oligonucleotides are also
 CC useful for treating an animal with a disease or condition associated with
 CC clusterin (e.g. hypercholesterolaemia; cardiovascular disorders;
 CC hyperproliferative disorders; and hyperlipidemic disorders). The present
 CC DNA sequence represents a clusterin antisense oligonucleotide of the
 CC invention. NOTE: The present DNA sequence has a phosphorothioate backbone
 CC and also contains 2'-O-methoxyethyl wings
 XX
 SQ Sequence 20 BP; 4 A; 8 C; 6 G; 2 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 6.4e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2082 CTTGGGTCTCTGAGCTGAC 2099
 DB 20 CTTGGGTCTCTGAGCTGAC 3
 RESULT 456
 ABZ86076
 ID ABZ86076 standard; DNA; 20 BP.

XX ABZ86076;
AC
XX
XX 17-OCT-2003 (first entry)
DT
XX
XX Human oligonucleotide sequence.
DE
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antisthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
OS
XX
XX MO200285308-A2.
PN
XX
XX 31-OCT-2002.
PD
XX
XX 23-APR-2002; 2002MO-US013135.
PF
XX
XX 24-APR-2001; 2001US-0286137P.
PR
XX
XX (EPIC-) EPIGENESIS PHARM INC.
PA
XX
XX Myce JW, Li Y, Sandrasagra A, Katz B, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahbuddin S;
XX
XX WPI; 2003-229219/22.
DR
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Claim 15; SEQ ID NO 1318; 872pp; English.
PS
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antisthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 1 A; 6 C; 7 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.34; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.44; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2641 CTGCAGCTGCTGCTGCAG 2658
DB 3 CTGCTGCTGCTGCTGCAG 20
RESULT 457
ABD22306
ID ABD22306 standard; DNA; 20 BP.

XX ABD22306;
AC
XX
XX 29-JUL-2004 (first entry)
DT
XX
XX Human stemlocalcin-derived oligo SEQ ID 1318.
DE
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antisthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
OS
XX
XX MO200285309-A2.
PN
XX
XX 31-OCT-2002.
PD
XX
XX 23-APR-2002; 2002MO-US013143.
PF
XX
XX 24-APR-2001; 2001US-0286036P.
PR
XX
XX (EPIC-) EPIGENESIS PHARM INC.
PA
XX
XX Myce JW, Li Y, Sandrasagra A, Katz B, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahbuddin S;
XX
XX WPI; 2003-093058/08.
DR
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 1318; 763pp; English.
PS
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antisthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, cancer,
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 1 A; 6 C; 7 G; 6 T; 0 U; 0 Other;
SQ

Query Match 0.3%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2641 CTGCACTGCTGCTGCGAG 2658
Db 3 CTGCTGCTGCTGCTGCGAG 20

RESULT 458

ADJ53373/c

ADJ53373 standard; DNA; 20 BP.

AC ADJ53373;

DT 06-MAY-2004 (first entry)

DE Human G protein-coupled receptor 6 DNA antisense oligonucleotide #22.

OS Homo sapiens.

PN US2004023380-A1.

PD 05-FEB-2004.

PF 31-JUL-2002; 2002US-00210479.

PR 31-JUL-2002; 2002US-00210479.

PA (ISIS-) ISIS PHARM INC.

PI Monia BP, Dobie KW;

PS WPI; 2004-142661/14.

PT Novel antisense compound targeted to nucleic acids encoding G protein-

PT coupled receptor 6 (GPCR-6), useful for treating animal having disease

PT associated with GPCR-6 e.g. metabolic, neuronal, motor, sensory or

PT behavioral disorders.

PS Example 15; SEQ ID NO 33; 54pp; English.

CC The invention relates to an antisense oligonucleotide targeted to a

CC nucleic acid encoding the human G protein-coupled receptor 6 (GPCR-6),

CC which specifically hybridises with the nucleic acid encoding the GPCR-6

CC and inhibits expression of the GPCR-6. The antisense oligonucleotide

CC comprises at least one modified internucleoside linkage, i.e. a

CC phosphorothioate linkage, at least one modified sugar moiety, preferably

CC a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase

CC comprising a 5-methylcytosine. The antisense oligonucleotides are useful

CC for inhibiting expression of the GPCR-6 and in preparation of a

CC composition for treating a disease or condition associated with GPCR-6,

CC e.g., a metabolic disorder, aberrant signal transduction in brain tissue,

CC a neuronal, motor, sensory, psychiatric or behavioural disorder or drug

CC or chemical addiction. This sequence represents an antisense

CC oligonucleotide of the invention.

CC Sequence 20 BP; 5 A; 8 C; 6 G; 1 T; 0 U; 0 Other;

QY

Db

Query Match 0.3%; Score 16.4; DB 1; Length 20;

Best Local Similarity 94.4%; Pred. No. 6.4e+02;

Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3053 TGGCTGCTGCTGCTGCTCA 3070

Db 20 TGGCGGGCTGCTGCTGCTCA 3

RESULT 459

ADJ53441

ADJ53441 standard; DNA; 20 BP.

AC ADJ53441;

DT 06-MAY-2004 (first entry)

DE Human GPCR-6 DNA antisense oligonucleotide target region #12.

OS Homo sapiens.

PN US2004023380-A1.

PD 05-FEB-2004.

PF 31-JUL-2002; 2002US-00210479.

PR 31-JUL-2002; 2002US-00210479.

PA (ISIS-) ISIS PHARM INC.

PI Monia BP, Dobie KW;

PS WPI; 2004-142661/14.

PT Novel antisense compound targeted to nucleic acids encoding G protein-

PT coupled receptor 6 (GPCR-6), useful for treating animal having disease

PT associated with GPCR-6 e.g. metabolic, neuronal, motor, sensory or

PT behavioral disorders.

PS Example 15; SEQ ID NO 101; 54pp; English.

CC The invention relates to an antisense oligonucleotide targeted to a

CC nucleic acid encoding the human G protein-coupled receptor 6 (GPCR-6),

CC which specifically hybridises with the nucleic acid encoding the GPCR-6

CC and inhibits expression of the GPCR-6. The antisense oligonucleotide

CC comprises at least one modified internucleoside linkage, i.e. a

CC phosphorothioate linkage, at least one modified sugar moiety, preferably

CC a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase

CC comprising a 5-methylcytosine. The antisense oligonucleotides are useful

CC for inhibiting expression of the GPCR-6 and in preparation of a

CC composition for treating a disease or condition associated with GPCR-6,

CC e.g., a metabolic disorder, aberrant signal transduction in brain tissue,

CC a neuronal, motor, sensory, psychiatric or behavioural disorder or drug

CC or chemical addiction. This sequence represents an antisense

CC oligonucleotide target region of the invention.

CC Sequence 20 BP; 1 A; 6 C; 8 G; 5 T; 0 U; 0 Other;

QY

Db

Query Match 0.3%; Score 16.4; DB 1; Length 20;

Best Local Similarity 94.4%; Pred. No. 6.4e+02;

Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3053 TGGCTGCTGCTGCTGCTCA 3070

Db 1 TGGCGGGCTGCTGCTGCTCA 18

RESULT 460

AAQ20035/c

AAQ20035 standard; DNA; 21 BP.

AC

AAQ20035;

```
XX 01-APR-1992 (first entry)
DT
XX Cross-linking oligomer 216 for targeting human TNF.
DE
XX deoxyribo nucleic acid, major groove; ethanocamino group;
KW aziridinylcytosine; cross-linking group; tumour necrosis factor; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "N4N4-ethanocytosine"
FT modified_base 2 /*tag= b
FT /mod_base= OTHER
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT modified_base 3 /*tag= c
FT /mod_base= OTHER
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT modified_base 4 /*tag= d
FT /mod_base= OTHER
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT modified_base 7 /*tag= e
FT /mod_base= m5c
FT modified_base 9 /*tag= f
FT /mod_base= m5c
FT modified_base 11 /*tag= g
FT /mod_base= m5c
FT modified_base 13 /*tag= h
FT /mod_base= m5c
FT modified_base 15 /*tag= i
FT /mod_base= m5c
FT modified_base 17 /*tag= j
FT /mod_base= m5c
FT modified_base 21 /*tag= k
FT /mod_base= OTHER
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"
XX
PN WO9118997-A.
XX
PD 12-DEC-1991.
XX
PF 25-MAY-1990; 90US-00529346.
XX
PR 25-MAY-1990; 90US-00529346.
PR 14-JAN-1991; 91US-00640654.
XX
XX (GILE-) GILEAD SCIE INC.
XX
XX Matteucci MD, Krawczyk S;
XX
XX WPI; 1992-007480/01.
XX
XX New sequence-specific non-photo-activated crosslinking agents - bind to
XX the major groove of duplex DNA and are esp. useful for treating latent
XX infections e.g. HIV.
XX
XX Example 4; Page 25; 42pp; English.
XX
XX The sequence is designed to target the Human tumour necrosis factor
XX beginning at nucleotide 1137 and to covalently cross-link to it via the
```

```
CC N4N4-ethanocytosine group. See also AAQ20031-Q20038
XX
XX Sequence 21 BP; 4 A; 7 C; 0 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 16.4; DB 1; Length 21;
XX Best Local Similarity 94.4%; Pred. No. 6.4e+02;
XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 1184 AAAGAGAGAGAGAAAT 1201
DB 20 AAAGAGAGAGAGAAAT 3
XX
RESULT 461
AAQ30385/C
ID AAQ30385 standard; DNA; 21 BP.
XX
AC AAQ30385;
XX
DT 25-MAR-2003 (revised)
DT 07-DEC-1992 (first entry)
XX
DE Oligomer TNP216 for forming triplex with HUMTNPAA target duplex.
XX
KW Tumour necrosis factor; herpes simplex; AIDS; modified; HIV; RSV; HFV;
KW malignancy; hepatitis; inflammation; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= N4 N4 ethanocytosine"
FT modified_base 2 /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT modified_base 3 /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT modified_base 4 /*tag= d
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
FT modified_base 7 /*tag= e
FT /mod_base= m5c
FT modified_base 9 /*tag= f
FT /mod_base= m5c
FT modified_base 11 /*tag= g
FT /mod_base= m5c
FT modified_base 13 /*tag= h
FT /mod_base= m5c
FT modified_base 15 /*tag= i
FT /mod_base= m5c
FT modified_base 17 /*tag= j
FT /mod_base= m5c
FT modified_base 21 /*tag= k
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
XX
PN WO9209705-A1.
XX
PD 11-JUN-1992.
XX
```

PF 25-NOV-1991; 91MO-US008811.
 XX
 PR 23-NOV-1990; 90US-00617907.
 PR 18-JAN-1991; 91US-00643382.
 PR 08-APR-1991; 91US-00683420.
 PR 17-APR-1991; 91US-00686544.
 PR 17-APR-1991; 91US-00686546.
 PR 17-APR-1991; 91US-00686547.
 PR 27-SEP-1991; 91US-00766733.
 XX
 PA (GILE-) GILEAD SCI INC.
 XX
 PI Froehner B, Krawczyk S, Matteucci MD, Milligan J;
 XX WPI, 1992-217083/26.
 XX
 PT New oligomers contg. modified bases - which form a triplex with G-C
 PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
 PT herpes malignancy and inflammation.
 XX
 PS Claim 12; Page 70; 77pp; English.
 XX
 CC The synthetic oligomer is capable of forming a triplex at physiological
 CC pH with a purine rich target sequence by coupling into the major groove
 CC of the duplex. The specific target sequence of this oligomer is the human
 CC tumour necrosis factor beginning at nucleotide 1137 contg. a purine rich
 CC sequence concd. on one strand of the duplex. The oligomer, and others
 CC like it are useful in diagnosis and therapy of diseases characterised by
 CC specific DNA duplex targets, e.g. HPV; HER; HIV, hepatitis B, herpes,
 CC malignant tumours and inflammation. The triple helices form under mild
 CC conditions thus assays may be carried out without subjecting the test
 CC specimen to harsh conditions. See also AAQ25452-25501 and AAQ30226-448.
 CC (Updated on 25-MAR-2003 to correct PN field.)
 CC
 SQ Sequence 21 BP; 4 A; 7 C; 0 G; 10 T; 0 U; 0 Other;
 XX
 QY Query Match 0.3%; Score 16.4; DB 1; Length 21;
 DB Best Local Similarity 94.4%; Pred. No. 6.4e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1184 AAAGAGAGAGAGAAAT 1201
 DB 20 AAAGAGAGAGAGAAAT 3
 XX
 RESULT 462
 AAQ30382/c
 ID AAQ30382 standard; DNA; 21 BP.
 XX
 AC AAQ30382;
 XX
 DT 25-MAR-2003 (revised)
 DT 07-DEC-1992 (first entry)
 XX
 DB Oligomer TN213 for forming triplex with HUMTNFAA target duplex.
 XX
 KW Tumour necrosis factor; herpes simplex; AIDS; modified; HIV; RSV; HPV;
 KW malignancy; hepatitis; inflammation; ss.
 XX
 OS Synthetic.
 XX
 PH Key Location/Qualifiers
 FT modified_base 1
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
 FT modified_base 2
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
 FT modified_base 3
 FT /*tag= c
 FT /mod_base= OTHER

FT modified_base 4
 FT /*tag= d
 FT /mod_base= OTHER
 FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
 FT modified_base 7
 FT /*tag= e
 FT /mod_base= m5c
 FT modified_base 9
 FT /*tag= f
 FT /mod_base= m5c
 FT modified_base 11
 FT /*tag= g
 FT /mod_base= m5c
 FT modified_base 13
 FT /*tag= h
 FT /mod_base= m5c
 FT modified_base 15
 FT /*tag= i
 FT /mod_base= m5c
 FT modified_base 17
 FT /*tag= j
 FT /mod_base= m5c
 FT modified_base 21
 FT /*tag= k
 FT /mod_base= OTHER
 FT /note= "OTHER= N6 methyl-8-oxo-2' deoxyadenine"
 XX
 PF 25-NOV-1991; 91MO-US008811.
 XX
 PR 23-NOV-1990; 90US-00617907.
 PR 18-JAN-1991; 91US-00643382.
 PR 08-APR-1991; 91US-00683420.
 PR 17-APR-1991; 91US-00686544.
 PR 17-APR-1991; 91US-00686546.
 PR 17-APR-1991; 91US-00686547.
 PR 27-SEP-1991; 91US-00766733.
 XX
 PA (GILE-) GILEAD SCI INC.
 XX
 PI Froehner B, Krawczyk S, Matteucci MD, Milligan J;
 XX WPI, 1992-217083/26.
 XX
 PT New oligomers contg. modified bases - which form a triplex with G-C
 PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
 PT herpes malignancy and inflammation.
 XX
 PS Claim 12; Page 70; 77pp; English.
 XX
 CC The synthetic oligomer is capable of forming a triplex at physiological
 CC pH with a purine rich target sequence by coupling into the major groove
 CC of the duplex. The specific target sequence of this oligomer is the human
 CC tumour necrosis factor beginning at nucleotide 1137 contg. a purine rich
 CC sequence concd. on one strand of the duplex. The oligomer, and others
 CC like it are useful in diagnosis and therapy of diseases characterised by
 CC specific DNA duplex targets, e.g. HPV; HER; HIV, hepatitis B, herpes,
 CC malignant tumours and inflammation. The triple helices form under mild
 CC conditions thus assays may be carried out without subjecting the test
 CC specimen to harsh conditions. See also AAQ25452-25501 and AAQ30226-448.
 CC (Updated on 25-MAR-2003 to correct PN field.)
 CC
 SQ Sequence 21 BP; 5 A; 6 C; 0 G; 10 T; 0 U; 0 Other;
 XX
 QY Query Match 0.3%; Score 16.4; DB 1; Length 21;
 DB Best Local Similarity 94.4%; Pred. No. 6.4e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1184 AAAGAGAGAGAGAAAT 1201

Db 20 AAAAGAGAGAGAGAAATT 3

RESULT 463

AAH62162
ID AAH62162 standard; DNA; 21 BP.

AC AAH62162;

DT 09-SEP-2004 (revised)

DT 12-SEP-2001 (first entry)

DE Voltage gated Na channel type 1 polymorphism containing DNA fragment #63.

KM Single nucleotide polymorphism; SNP; human; cancer; inflammation;

KM heart disease; paternity testing; forensic science; ds.

OS Homo sapiens.

OS Unidentified.

Key Location/Qualifiers
FT 11
FT /tag= a
FT /standard_name= "single nucleotide polymorphism"

MO200138576-A2.

31-MAY-2001.

17-NOV-2000; 2000MO-US031639.

24-NOV-1999; 99US-0167334P.

(WHED) WHITEHEAD INST BIOMEDICAL RES.

Cargill M, Ireland JS, Lander ES;

WPI; 2001-367705/38.

PT New nucleic acid segments of the human genome, particularly from genes including polymorphic sites, for phenotype correlation, forensics, paternity testing, medicine and genetic analysis.

PS Claim 1; Page 34; 80pp; English.

CC DNA sequences AAH62100 - AAH62688 represent segments of human genes which contain single nucleotide polymorphisms (SNPs). A method is included in the invention for analysing a nucleic acid sample, which consists of determining the base occupying any one of the polymorphic sites given in the SNP containing sequences. The nucleotide sequences can be used in the diagnosis or monitoring of diseases, such as cancer, inflammation, heart diseases, diseases of the cardiovascular system, and infection by microorganisms. The oligonucleotides are also useful in the manufacture of a medicament for the treatment or prophylaxis of the diseases, and as a pharmaceutical. SNP containing oligonucleotides are useful in applications such as phenotype correlation, forensics, paternity testing, medicine and genetic analysis

CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key

XX Sequence 21 BP; 3 A; 8 C; 7 G; 3 T; 0 U; 0 Other;

XX Query Match 0.3%; Score 16.4; DB 1; Length 21;

XX Best Local Similarity 94.4%; Pred. No. 6.4e+02; Mismatches 1; Indels 0; Gaps 0;

QY 1583 GCCAGCTGTATGGGACC 1600

Db 1 GCCAGCGGTATGGGACC 18

RESULT 464

ADJ13701/C
ID ADJ13701 standard; DNA; 21 BP.

AC ADJ13701;

DT 20-MAY-2004 (first entry)

DE Human DNA probe used to immobilise CpG methylated DNA SeqID 828.

KM probe; ss; chemical modification; methylation; array; CpG island; tumour suppressor; p16; human; H69; H1618.

OS Homo sapiens.

PN US2003152950-A1.

14-ANG-2003.

27-JUN-2002; 2002US-00184085.

27-JUN-2001; 2001US-0301370P.

(GARV/) GARNER H R.

(MINN/) MINNA J D.

(LUEB/) LUEBKE K J.

(BALO/) BALOG R P.

Garner HR, Minna JD, Luebke KJ, Balog RP;

WPI; 2003-874843/81.

PT Analysis of chemical modification of DNA involves obtaining sample of DNA to be analyzed, treating DNA with chemical reagents that result in different base sequences, and determining sequence of resulting DNA.

PS Example 1; SEQ ID NO 828; 210pp; English.

CC This invention relates to a novel method for analysing chemically modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in the different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of CC probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In CC particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene p16 from two CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the invention.

XX Sequence 21 BP; 2 A; 13 C; 1 G; 5 T; 0 U; 0 Other;

XX Query Match 0.3%; Score 16.4; DB 1; Length 21;

XX Best Local Similarity 94.4%; Pred. No. 6.4e+02; Mismatches 1; Indels 0; Gaps 0;

QY 2436 GGATGAGAGGGGAGAGG 2453

Db 20 GGATGAGAGGGGAGAGG 3

RESULT 465

ADJ13846/C
ID ADJ13846 standard; DNA; 21 BP.

AC ADJ13846;

DT 20-MAY-2004 (first entry)

DE Human DNA probe used to immobilise CpG methylated DNA SeqID 973.

KM probe; seq: chemical modification; methylation; array; CpG island;
 KM tumour suppressor; p16; human; H69; H1618.
 OS Homo sapiens.
 XX US2003152950-A1.
 XX 14-AUG-2003.
 PD 27-JUN-2002; 2002US-00184085.
 PF 27-JUN-2001; 2001US-0301370P.
 XX (GARN/) GARNER H R.
 XX (MINN/) MINNA J D.
 XX (LUEB/) LUEBKE K J.
 XX (BALO/) BALOG R P.
 PI Garner HR, Minna JD, Luebke KJ, Balog RP;
 DR WPI; 2003-874843/81.
 XX
 XX Analysis of chemical modification of DNA involves obtaining sample of DNA
 PT to be analyzed, treating DNA with chemical reagents that result in
 PT different base sequences, and determining sequence of resulting DNA.
 XX
 PS Example 1; SEQ ID NO 973; 210pp; English.
 XX
 XX This invention relates to a novel method for analysing chemically
 CC modified macromolecules. Specifically, it refers to a high throughput
 CC method for the parallel analysis of many potential sites of chemical
 CC modification (e.g. methylation) in DNA. The present invention describes
 CC treating the DNA with one or more chemical reagents that result in
 CC different base sequences depending upon the presence or absence of the
 CC modification of interest. Accordingly, a device comprising an array of
 CC probes is provided to hybridise with and select the altered DNA sequences
 CC that comprise the modifications of interest such as a CpG island. In
 CC particular, this invention refers to analysing the methylation pattern of
 CC a region of the promoter for the tumour suppressor gene p16 from two
 CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
 CC is a human DNA probe used to immobilise CpG methylated DNA of the
 CC invention.
 CC
 SQ Sequence 21 BP; 3 A; 11 C; 1 G; 6 T; 0 U; 0 Other;
 QY
 Db Query Match 0.3%; Score 16.4; DB 1; Length 21;
 Best Local Similarity 94.4%; Pred. No. 6.4e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2436 GGATGAGAAAGGGGAGAGG 2453
 Db 19 GGATGAGATGGGAGAGG 2
 AC
 XX ADJ13700;
 XX 20-MAY-2004 (first entry)
 DT
 XX Human DNA probe used to immobilise CpG methylated DNA SeqID 827.
 DE
 XX probe; seq: chemical modification; methylation; array; CpG island;
 KM tumour suppressor; p16; human; H69; H1618.
 XX
 OS Homo sapiens.
 XX US2003152950-A1.
 XX 14-AUG-2003.
 PD

PF 27-JUN-2002; 2002US-00184085.
 XX 27-JUN-2001; 2001US-0301370P.
 XX (GARN/) GARNER H R.
 XX (MINN/) MINNA J D.
 XX (LUEB/) LUEBKE K J.
 XX (BALO/) BALOG R P.
 PI Garner HR, Minna JD, Luebke KJ, Balog RP;
 DR WPI; 2003-874843/81.
 XX
 XX Analysis of chemical modification of DNA involves obtaining sample of DNA
 PT to be analyzed, treating DNA with chemical reagents that result in
 PT different base sequences, and determining sequence of resulting DNA.
 XX
 PS Example 1; SEQ ID NO 827; 210pp; English.
 XX
 XX This invention relates to a novel method for analysing chemically
 CC modified macromolecules. Specifically, it refers to a high throughput
 CC method for the parallel analysis of many potential sites of chemical
 CC modification (e.g. methylation) in DNA. The present invention describes
 CC treating the DNA with one or more chemical reagents that result in
 CC different base sequences depending upon the presence or absence of the
 CC modification of interest. Accordingly, a device comprising an array of
 CC probes is provided to hybridise with and select the altered DNA sequences
 CC that comprise the modifications of interest such as a CpG island. In
 CC particular, this invention refers to analysing the methylation pattern of
 CC a region of the promoter for the tumour suppressor gene p16 from two
 CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
 CC is a human DNA probe used to immobilise CpG methylated DNA of the
 CC invention.
 CC
 SQ Sequence 21 BP; 2 A; 13 C; 1 G; 5 T; 0 U; 0 Other;
 QY
 Db Query Match 0.3%; Score 16.4; DB 1; Length 21;
 Best Local Similarity 94.4%; Pred. No. 6.4e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2436 GGATGAGAAAGGGGAGAGG 2453
 Db 21 GGATGAGAGGGGAGAGG 4
 AC
 XX ADJ13810;
 XX 20-MAY-2004 (first entry)
 DT
 XX Human DNA probe used to immobilise CpG methylated DNA SeqID 937.
 DE
 XX probe; seq: chemical modification; methylation; array; CpG island;
 KM tumour suppressor; p16; human; H69; H1618.
 XX
 OS Homo sapiens.
 XX US2003152950-A1.
 XX 14-AUG-2003.
 PD
 XX 27-JUN-2002; 2002US-00184085.
 XX 27-JUN-2001; 2001US-0301370P.
 XX (GARN/) GARNER H R.
 XX (MINN/) MINNA J D.
 XX (LUEB/) LUEBKE K J.
 XX (BALO/) BALOG R P.
 PA

PI Garner HR, Minna JD, Luebke KJ, Balog RP;
XX WPI; 2003-874843/81.
XX
XX
PT Analysis of chemical modification of DNA involves obtaining sample of DNA
PT to be analyzed, treating DNA with chemical reagents that result in
PT different base sequences, and determining sequence of resulting DNA.
XX
XX Example 1; SEQ ID NO 937; 210pp; English.
XX
XX This invention relates to a novel method for analysing chemically
XX modified macromolecules. Specifically, it refers to a high throughput
XX method for the parallel analysis of many potential sites of chemical
XX modification (e.g. methylation) in DNA. The present invention describes
XX treating the DNA with one or more chemical reagents that result in
XX different base sequences depending upon the presence or absence of the
XX modification of interest. Accordingly, a device comprising an array of
XX probes is provided to hybridise with and select the altered DNA sequences
XX that comprise the modifications of interest such as a CpG island. In
XX particular, this invention refers to analysing the methylation pattern of
XX a region of the promoter for the tumour suppressor gene p16 from two
XX human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
XX is a human DNA probe used to immobilise CpG methylated DNA of the
XX invention.
XX
SQ Sequence 21 BP; 2 A; 12 C; 1 G; 6 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 16.4; DB 1; Length 21;
Best Local Similarity 94.4%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2436 GGATGAGAGGGGAGAGG 2453
DB 19 GGATGAGAGGGGAGAGG 2
XX
XX
RESULT 468
ADJ13739/c
ID ADJ13739 standard; DNA; 21 BP.
XX
XX ADJ13739;
AC
XX
DT 20-MAY-2004 (first entry)
XX
XX Human DNA probe used to immobilise CpG methylated DNA seqid 866.
DE
XX
XX probe; ss; chemical modification; methylation; array; CpG island;
KM tumour suppressor; p16; human; H69; H1618.
XX
XX Homo sapiens.
OS
XX
XX US2003152950-A1.
PN
XX
PD 14-AUG-2003.
XX
XX 27-JUN-2002; 2002US-00184085.
PF
XX
PR 27-JUN-2001; 2001US-0301370P.
XX
XX (GARN/) GARNER H R.
PA (MINN/) MINNA J D.
PA (LUEB/) LUEBKE K J.
PA (BALO/) BALOG R P.
XX
PI Garner HR, Minna JD, Luebke KJ, Balog RP;
XX WPI; 2003-874843/81.
XX
XX Analysis of chemical modification of DNA involves obtaining sample of DNA
PT to be analyzed, treating DNA with chemical reagents that result in
PT different base sequences, and determining sequence of resulting DNA.
XX
XX Example 1; SEQ ID NO 866; 210pp; English.
PS

XX This invention relates to a novel method for analysing chemically
XX modified macromolecules. Specifically, it refers to a high throughput
XX method for the parallel analysis of many potential sites of chemical
XX modification (e.g. methylation) in DNA. The present invention describes
XX treating the DNA with one or more chemical reagents that result in
XX different base sequences depending upon the presence or absence of the
XX modification of interest. Accordingly, a device comprising an array of
XX probes is provided to hybridise with and select the altered DNA sequences
XX that comprise the modifications of interest such as a CpG island. In
XX particular, this invention refers to analysing the methylation pattern of
XX a region of the promoter for the tumour suppressor gene p16 from two
XX human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
XX is a human DNA probe used to immobilise CpG methylated DNA of the
XX invention.
XX
SQ Sequence 21 BP; 2 A; 13 C; 0 G; 6 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 16.4; DB 1; Length 21;
Best Local Similarity 94.4%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2436 GGATGAGAGGGGAGAGG 2453
DB 18 GGATGAGAGGGGAGAGG 1
XX
XX
RESULT 469
ADJ13039/c
ID ADJ13039 standard; DNA; 21 BP.
XX
XX ADJ13039;
AC
XX
DT 20-MAY-2004 (first entry)
XX
XX Human DNA probe used to immobilise CpG methylated DNA seqid 166.
DE
XX
XX probe; ss; chemical modification; methylation; array; CpG island;
KM tumour suppressor; p16; human; H69; H1618.
XX
XX Homo sapiens.
OS
XX
XX US2003152950-A1.
PN
XX
PD 14-AUG-2003.
XX
XX 27-JUN-2002; 2002US-00184085.
PF
XX
PR 27-JUN-2001; 2001US-0301370P.
XX
XX (GARN/) GARNER H R.
PA (MINN/) MINNA J D.
PA (LUEB/) LUEBKE K J.
PA (BALO/) BALOG R P.
XX
PI Garner HR, Minna JD, Luebke KJ, Balog RP;
XX WPI; 2003-874843/81.
XX
XX Analysis of chemical modification of DNA involves obtaining sample of DNA
PT to be analyzed, treating DNA with chemical reagents that result in
PT different base sequences, and determining sequence of resulting DNA.
XX
XX Example 1; SEQ ID NO 166; 210pp; English.
XX
XX This invention relates to a novel method for analysing chemically
XX modified macromolecules. Specifically, it refers to a high throughput
XX method for the parallel analysis of many potential sites of chemical
XX modification (e.g. methylation) in DNA. The present invention describes
XX treating the DNA with one or more chemical reagents that result in
XX different base sequences depending upon the presence or absence of the
XX modification of interest. Accordingly, a device comprising an array of
XX probes is provided to hybridise with and select the altered DNA sequences

CC that comprise the modifications of interest such as a CpG island. In
CC particular, this invention refers to analysing the methylation pattern of
CC a region of the promoter for the tumour suppressor gene p16 from two
CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
CC is a human DNA probe used to immobilise CpG methylated DNA of the
CC invention.

XX Sequence 21 BP; 2 A; 13 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.4; DB 1; Length 21;

Best Local Similarity 94.4%; Pred. No. 6.4e+02;

Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2436 GGATGAGAGGGGAGAGG 2453
18 GGATGAGAGGGGAGAGG 1

RESULT 470

ADJ13774/c
ID ADJ13774 standard; DNA; 21 BP.

AC ADJ13774;

DT 20-MAY-2004 (first entry)

XX Human DNA probe used to immobilise CpG methylated DNA Seqid 901.

XX probe; ss; chemical modification; methylation; array; CpG island;
KM tumour suppressor; p16; human; H69; H1618.

OS Homo sapiens.

PN US2003152950-A1.

PD 14-AUG-2003.

PF 27-JUN-2002; 2002US-00184085.

PR 27-JUN-2001; 2001US-0301370P.

PA (GARN/) GARNER H R.

PA (MINN/) MINNA J D.

PA (LUEB/) LUEBKE K J.

PA (BALO/) BALOG R P.

PI Garner HR, Minna JD, Luebke KJ, Balog RP;

DR WPI; 2003-874843/81.

XX Analysis of chemical modification of DNA involves obtaining sample of DNA

PT to be analyzed, treating DNA with chemical reagents that result in

PT different base sequences, and determining sequence of resulting DNA.

XX Example 1; SEQ ID NO 901; 210pp; English.

XX This invention relates to a novel method for analysing chemically

CC modified macromolecules. Specifically, it refers to a high throughput

CC method for the parallel analysis of many potential sites of chemical

CC modification (e.g. methylation) in DNA. The present invention describes

CC treating the DNA with one or more chemical reagents that result in

CC modification of interest. Accordingly, a device comprising an array of

CC probes is provided to hybridise with and select the altered DNA sequences

CC that comprise the modifications of interest such as a CpG island. In

CC particular, this invention refers to analysing the methylation pattern of

CC a region of the promoter for the tumour suppressor gene p16 from two

CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence

CC is a human DNA probe used to immobilise CpG methylated DNA of the

CC invention.

XX Sequence 21 BP; 2 A; 11 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.4; DB 1; Length 21;

Best Local Similarity 94.4%; Pred. No. 6.4e+02;

Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2436 GGATGAGAGGGGAGAGG 2453

19 GGATGAGAGGGGAGAGG 2

RESULT 471

ADJ13107/c
ID ADJ13107 standard; DNA; 21 BP.

AC ADJ13107;

DT 20-MAY-2004 (first entry)

XX Human DNA probe used to immobilise CpG methylated DNA Seqid 234.

XX probe; ss; chemical modification; methylation; array; CpG island;
KM tumour suppressor; p16; human; H69; H1618.

OS Homo sapiens.

PN US2003152950-A1.

PD 14-AUG-2003.

PF 27-JUN-2002; 2002US-00184085.

PR 27-JUN-2001; 2001US-0301370P.

PA (GARN/) GARNER H R.

PA (MINN/) MINNA J D.

PA (LUEB/) LUEBKE K J.

PA (BALO/) BALOG R P.

PI Garner HR, Minna JD, Luebke KJ, Balog RP;

DR WPI; 2003-874843/81.

XX Analysis of chemical modification of DNA involves obtaining sample of DNA

PT to be analyzed, treating DNA with chemical reagents that result in

PT different base sequences, and determining sequence of resulting DNA.

XX Example 1; SEQ ID NO 234; 210pp; English.

XX This invention relates to a novel method for analysing chemically

CC modified macromolecules. Specifically, it refers to a high throughput

CC method for the parallel analysis of many potential sites of chemical

CC modification (e.g. methylation) in DNA. The present invention describes

CC treating the DNA with one or more chemical reagents that result in

CC modification of interest. Accordingly, a device comprising an array of

CC probes is provided to hybridise with and select the altered DNA sequences

CC that comprise the modifications of interest such as a CpG island. In

CC particular, this invention refers to analysing the methylation pattern of

CC a region of the promoter for the tumour suppressor gene p16 from two

CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence

CC is a human DNA probe used to immobilise CpG methylated DNA of the

CC invention.

XX Sequence 21 BP; 4 A; 12 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.4; DB 1; Length 21;

Best Local Similarity 94.4%; Pred. No. 6.4e+02;

Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2437 GATGAGAGGGGAGAGGT 2454

21 GATGAGAGGGGAGAGGT 4

```

RESULT 472
ABT21572
ID   ABT21572 standard; DNA; 22 BP.
XX
AC   ABT21572;
XX
DT   16-APR-2003 (first entry)
XX
DE   Multiplex group PCR primer #319.
XX
KM   Racing potential; horse; grandpaternal DNA; over-represented; breeding;
XX   grandmother; performance; progeny horse; PCR; primer; ss.
XX
OS   unidentified.
XX
PN   MO200292851-A2.
XX
PD   21-NOV-2002.
XX
PF   15-MAY-2002; 2002MO-GB002273.
XX
PR   15-MAY-2001; 2001GB-00011886.
XX
PA   (ANIM-) ANIMAL HEALTH TRUST.
XX   (BRHO-) BRITISH HORSE RACING BOARD.
XX
PI   Blime MM, Swinburne JB;
XX
DR   WPI; 2003-129314/12.
XX
PT   Determining the racing potential of a horse comprises measuring whether
XX   grandpaternal or grandmaternal DNA from the selected grandmother DNA is
XX   over-represented in the genome of the horse.
XX
PS   Example 2; Page 25; 49pp; English.
XX
CC   The invention relates to a novel method for determining racing potential
XX   of a horse. The method comprises measuring: whether grandpaternal DNA is
XX   over-represented in the genome of the horse; or in the case where one of
XX   the grandmothers was selected for breeding on the basis of racing
XX   performance, whether grandmaternal DNA from the selected grandmother is
XX   over-represented in the genome of the horse which indicates that the
XX   horse has good racing potential. The method of the invention is useful
XX   for determining the racing potential of a horse or for obtaining a
XX   progeny horse with good racing potential. This polynucleotide sequence
XX   represents a PCR primer used in the detection method of over-
XX   representation of DNA from male grandparents of the invention
XX
SQ   Sequence 22 BP; 1 A; 8 C; 2 G; 11 T; 0 U; 0 Other;
XX
Query Match      0.3%; Score 16.4; DB 1; Length 22;
Best Local Similarity 94.4%; Pred. No. 6.4e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY      4870 TCTCAGTTCTTCTCTG 4887
DB      3 TCTCAGTTCTCTCTCTG 20
XX
RESULT 473
AAQ67954/c
ID   AAQ67954 standard; DNA; 21 BP.
XX
AC   AAQ67954;
XX
DT   25-MAR-2003 (revised)
XX   08-DEC-1994 (first entry)
XX
DE   CD44 PCR primer E3.
XX
KM   CD44; exon 6; cell surface protein; primer; polymerase chain reaction;
XX   PCR; amplification; tumor; imaging; therapy; ss.
XX

```

```

OS   Synthetic.
XX
PN   WO9412631-A1.
XX
PD   09-JUN-1994.
XX
PF   22-NOV-1993; 93WO-GB002394.
XX
PR   20-NOV-1992; 92GB-00024386.
XX   16-DEC-1992; 92GB-00026165.
XX   20-JUL-1993; 93WO-GB001520.
XX
PA   (ISIS-) ISIS INNOVATION LTD.
XX
PI   Tarin D, Matsumura Y;
XX
DR   WPI; 1994-200260/24.
XX
PT   New antibody specific for peptide of exon 6 of CD44 - also exon 6 peptide
XX   fragments and fusion protein, useful for diagnosis, treatment and imaging
XX   of tumours.
XX
PS   Disclosure; Page 25; 73pp; English.
XX
CC   The primers given in AAQ67948-58 are used for cancer diagnosis by PCR
XX   assay. The primers given in AAQ67948-51 anneal to the standard protein of
XX   CD44, and those given in AAQ67952-58 anneal to exon sequences. (Updated
XX   on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 21 BP; 5 A; 6 C; 7 G; 3 T; 0 U; 0 Other;
XX
Query Match      0.3%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 6.8e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY      3255 CCAGAACCTGGCTCTGCTCT 3275
DB      21 CCAGAACCTGCTCTGAGCT 1
XX
RESULT 474
AAQ55904/c
ID   AAQ55904 standard; DNA; 21 BP.
XX
AC   AAQ55904;
XX
DT   25-MAR-2003 (revised)
XX   25-JUL-1994 (first entry)
XX
DE   PCR primer for amplifying region of CD44 gene.
XX
KM   PCR; polymerase chain reaction; CD44; cancer; bladder cancer; detection;
XX   diagnosis; carcinoma; solid tumour; ss.
XX
OS   Synthetic.
XX
PN   WO9402633-A1.
XX
PD   03-FEB-1994.
XX
PF   20-JUL-1993; 93WO-GB001520.
XX
PR   21-JUL-1992; 92GB-00015498.
XX   20-NOV-1992; 92GB-00024386.
XX   16-DEC-1992; 92GB-00026165.
XX
PA   (ISIS-) ISIS INNOVATION LTD.
XX
PI   Barin D, Matsumura Y;
XX
DR   WPI; 1994-048850/06.
XX
PT   Method for diagnosing neoplasia, e.g. carcinoma - utilises unequal
XX

```

PT splicing of CD44 gene in cancer patients compared to controls.

XX

XX Example 4; Page 17; 42pp; English.

XX

11 primers (AAQ55899-Q55908) were used in the amplification of a CD44

CC gene region and in the subsequent detection of the amplification

CC products. cDNA derived from urine of 90 patients (44 with biopsy proven

CC bladder cancer, 46 from normal volunteers and patients with neoplastic

CC inflammation of the bladder) was divided equally into two tubes, one for

CC PCR with primers B1 (AAQ55902) and B5 (AAQ55906) to amplify the

CC transcript for diagnosis, the other for PCR with P1 (AAQ55898) and P4

CC (AAQ55901) to amplify the standard form of CD44. When all exons were

CC expressed (bladder cancer), B1 and B4 produced a 735 bp band. There was

CC no band in tracks containing cDNA from normal patients or those with

CC bladder inflammation. A 482 bp band obtained in all cases with P1 and P4

CC indicated that diagnostically significant differences between urine from

CC patients with bladder cancer and controls was due to alternative splicing

CC of the CD44 gene. The method allows diagnosis of neoplasia based on over-

CC expression of the CD44 exon. Solid tumours, especially carcinomas, can be

CC accurately detected. This primer is complementary to a sequence contained

CC within exon 11 of the CD44 gene. (Updated on 25-MAR-2003 to correct PN

CC field.)

XX

SQ Sequence 21 BP; 5 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 16.2; DB 1; Length 21;

Best Local Similarity 85.7%; Pred. No. 6.8e+02;

Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

DB 21 CCAAGAACTGTCCTCGGACT 1

3255 CCAAGAACTGTCCTCGGACT 3275

|||||

RESULT 475

AAQ75682/c

ID AAQ75682 standard; DNA; 21 BP.

XX

XX AAQ75682;

AC

XX

04-AUG-1995 (first entry)

DT

XX

Reverse transcription primer used in cDNA analysis technique.

DS

XX

Analysis; gene expression; reverse transcription; primer; cDNA;

KM aggregate; restriction enzyme; ss.

KM

XX

Synthetic.

OS

XX

JP0630397-A.

XX

PN

01-NOV-1994.

PD

XX

16-APR-1993; 93JP-00112515.

PF

XX

16-APR-1993; 93JP-00112515.

PR

XX

(NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

PA

XX

WPI; 1995-018287/03.

DR

XX

Analysis of cDNA and gene expression - by amplification of mRNA followed

PT by digestion with restriction enzymes.

PT

XX

Disclosure; Page 7; 11pp; Japanese.

PS

XX

A method for the analysis of cDNA comprises (a) preparing an aggregate of

CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of

CC labelled reverse transcription primers (GENSEQ files AAQ75547-075798)

CC and using the aggregate of mRNAs as the template for each reverse

CC transcription primer; (b) digesting each of the prepared aggregates of

CC the double-stranded cDNAs with restriction enzyme and; (c)

CC electrophoresing the digested aggregate of cDNAs in separate lanes. The

```

CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred.No. 6.8e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 5388 GAATTAAAAAAATACAAAAA 5408
DB 21 GAATTAAAAAAATACAAAAA 1
XX
RESULT 476
AAQ75645/c
ID AAQ75645 standard; DNA; 21 BP.
XX
AC AAQ75645;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PE 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
RA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
DX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure, Page 6, 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENBANK files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred.No. 6.8e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 5399 ATACAAAAAGAAAAAATGAA 5419
DB 21 ATACAAAAAGAAAAAATGAA 1
XX
RESULT 477
AAQ90391
ID AAQ90391 standard; DNA; 21 BP.
XX
AC AAQ90391;
XX
DT 08-JAN-1996 (first entry)
XX

```

```

DE CP-1 (synthetic DNA probe with 3'ribonucleoside terminal #2).
XX
XX CP-1; HLA; dQa; 3' ribonucleoside; self-addressable electronic device;
KM SAED; hybridisation; ss.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FT misc_feature 21
FT /tag= a
FT /note= "3' ribonucleoside terminal"
XX
XX WO9512808-A1.
XX
XX 11-MAY-1995.
XX
XX
XX 26-OCT-1994; 94WO-US012270.
XX
XX 01-NOV-1993; 93US-00146504.
XX
XX (NANO-) NANOGEN INC.
XX
XX PA
XX PI Heller MJ, Tu E;
XX
XX WPI; 1995-185870/24.
XX
XX New self-addressable electronic devices - used for multi-step and
PT multiplex reactions such as DNA hybridisation(s), clinical diagnostics
PT and bio/polymer synthesis.
XX
XX Example 1; Page 40; 86pp; English.
XX
XX The sequences represented by, AAQ90390-90401 are synthetic DNA probes
CC containing 3' ribonucleoside termini. The sequences shown in AAQ90402-15
CC are synthetic DNA probes with 5' amino termini. These sequences were
CC specific for the polymorphisms of HLA gene dQa. The sequences were used
CC in the device of the invention. This is a self-addressable electronic
CC device (SAED) that can be used to carry out multi-step and multiplex
CC reactions, such as nucleic acid hybridisations. The advantages of this
CC method are that these reactions can be carried out with complete and
CC precise electronic control, and that the rate, specificity and
CC sensitivity of these reactions are greatly improved at micro-locations
XX
XX Sequence 21 BP; 20 A; 0 C; 0 G; 0 T; 1 U; 0 Other;
SQ
Query Match 0.3%; Score 16.2; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.8e+02;
Matches 17; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
QY 5396 AAAATGCAGAAAAAGAAAAAT 5416
DB 1 AAAAAAAAAAAAAAAAAAAAAAU 21
RESULT 478
AA10743
ID AA10743 standard; RNA; 21 BP.
XX
XX AA10743;
AC
XX
XX 09-SEP-1996 (first entry)
DE Oligonucleotide probe, CP-1.
XX
XX Electronically self-addressable device; ED; electrode; current source;
KM attachment layer; permeable; counterion; genetic typing; probe;
XX detection; ss.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FT modified_base 21
FT /tag= a

```

```

FT /note= "3'-ribonucleoside terminus"
XX
XX WO9601836-A1.
XX
XX 25-JAN-1996.
XX
XX 05-JUL-1995; 95WO-US008570.
XX
XX 07-JUL-1994; 94US-00271882.
XX
XX (NANO-) NANOGEN INC.
XX
XX PI Heller MJ, Tu E, Evans GA, Sosnowski RG;
XX
XX WPI; 1996-097582/10.
XX
XX Electronically self-addressable device - used for electronic control of,
PT e.g. nucleic acid hybridisation.
XX
XX Example 1; Page 60; 155pp; English.
XX
XX The sequences given in AA10742-67 are synthetic oligonucleotides which
CC are used in the construction of the electronically self-addressable
CC device (ED) of the invention. The ED comprises a substrate, an electrode
CC or opt. a number of electrodes supported by the substrate, a current
CC source operatively connected to the electrode and an attachment layer
CC adjacent to the electrode which is permeable to a counterion but not
CC permeable to a molecule capable of insulating or binding to the
CC electrode. The attachment layer is capable of attaching a macromolecule.
CC The ED is used for genetic typing and comprises a number of
CC electronically addressable locations each comprising an electrode, and a
CC binding entity, such as one of these probes, attached to each of the
CC locations capable of detecting the presence of a genetic sequence
XX
XX Sequence 21 BP; 20 A; 0 C; 0 G; 0 T; 1 U; 0 Other;
SQ
Query Match 0.3%; Score 16.2; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 6.8e+02;
Matches 17; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
QY 5396 AAAATGCAGAAAAAGAAAAAT 5416
DB 1 AAAAAAAAAAAAAAAAAAAAAAU 21
RESULT 479
AAV36491
ID AAV36491 standard; CDNA; 21 BP.
XX
XX AAV36491;
AC
XX
XX 28-SEP-1998 (first entry)
DE Primer R2.5', amplifies bases 535-555 of the CP140 gene.
XX
XX Partial centrosomal protein 140; CP140; scleroderma; sclerotic disease;
KM Primer; amplification; PCR; PCR-RFLP; ss.
XX
XX Homo sapiens.
OS
XX
XX WO9820025-A1.
XX
XX 14-MAY-1998.
XX
XX 04-NOV-1997; 97WO-US020520.
XX
XX 05-NOV-1996; 96US-00743200.
XX
XX (UYMA-) UNITV MASSACHUSETTS.
XX
XX PI Doxsey SJ;
XX
XX WPI; 1998-286855/25.

```

XX Screening for sclerotic disease in patients - by detection of anti-CP140
 PT antibody; altered CP140 mRNA, altered CP140 protein levels or an
 PT alteration in the CP140 gene.
 XX
 PS Disclosure; Page 31; 54pp; English.
 XX
 CC Primers AAV3648-736500, and primers AAV40423-V40431 were used to amplify
 CC regions of the centrosomal protein 140 (CP140) gene from both normal and
 CC sclerotic individuals. To determine if patients have the disease, the
 CC obtained DNA from both types of individuals is subjected to standard PCR-
 CC RFLP. If any defects are identified at this loci, then the PCR fragments
 CC which contain the defective fragments are cloned and sequenced. The
 CC location of the defect can now be determined, characterisation of the
 CC gene can occur, thus allowing this gene to be used as a diagnostic tool
 XX
 SQ Sequence 21 BP; 9 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 16.2; DB 1; Length 21;
 Best Local Similarity 85.7%; Pred. No. 6.8e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2838 CAGGACAGACAGATCAACATG 2858
 DB 1 CAGGACAGTACAGTCAAGAG 21
 XX
 RESULT 480
 AAV57641
 ID AAV57641 standard; DNA; 21 BP.
 XX
 AC AAV57641;
 XX
 DT 27-NOV-1998 (first entry)
 XX
 DE Exon 4 of an ENAC subunit amplifying forward primer B-5.
 XX
 KW Epithelial sodium channel; ENAC; mutation; pathological condition;
 KW ion transport; water retention; blood pressure; metabolic acidosis;
 KW chronic respiratory disease; inflammation; human; PCR primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN MO9840516-A1.
 XX
 PD 17-SEP-1998.
 XX
 PF 11-MAR-1998; 98WO-US004681.
 XX
 PR 11-MAR-1997; 97US-0040171P.
 XX
 PA (UYVA) UNITV YALE.
 XX
 PI Lifton RP, Chang SS, Rossier BC;
 XX
 DR WPI; 1998-506740/43.
 XX
 PT Determination of presence of mutation conferring pathological condition
 PT mediated by altered ion transport - comprises analysing sample for
 PT presence of mutation of potassium ion channel gene, ENAC, or in its
 PT encoded protein.
 XX
 PS Example 1; Page 38; 56pp; English.
 XX
 CC Sequences shown in AAV57601 to AAV57686 represent primers used for the
 CC PCR amplification of the exons of the different subunits of the human
 CC epithelial sodium channel (ENAC) gene. This is used in the method of the
 CC invention of determining the presence or absence of a mutation conferring
 CC a pathological condition mediated by altered ion transport. The method
 CC comprises analysing a nucleic acid sample, or protein sample, for the
 CC presence of a mutation in the ENAC gene, or in its encoded protein. A
 CC vector containing a nucleic acid encoding a human altered variant of the

CC ENAC protein can be used to transform host cells to produce an altered
 CC variant of an ENAC protein. The protein can be used to identify agents
 CC that effect ion transport. The agonists can be used to treat pathological
 CC conditions resulting from abnormal ion transport, such as water
 CC retention, increased blood pressure, chronic respiratory and metabolic
 CC acidosis and inflammation
 XX
 SQ Sequence 21 BP; 2 A; 8 C; 6 G; 5 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 16.2; DB 1; Length 21;
 Best Local Similarity 85.7%; Pred. No. 6.8e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2635 CCGTCCCTGACGCTGCTG 2655
 DB 1 CCGTCCCTGACGCTGATGCTG 21
 XX
 RESULT 481
 AAZ5733/C
 ID AAZ5733 standard; DNA; 21 BP.
 XX
 AC AAZ5733;
 XX
 DT 30-NOV-1999 (first entry)
 XX
 DE Human polymorphic region 922.
 XX
 KW Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
 KW cell viability; loss of heterozygosity; precancerous condition; ASI;
 KW allele specific inhibitor; somatic cell; diagnosis; prevention;
 KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
 KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
 KW graft versus host disease; malignant cell removal; bone marrow; ss.
 XX
 OS Homo sapiens.
 XX
 PN MO9841648-A2.
 XX
 PD 24-SEP-1998.
 XX
 PF 19-MAR-1998; 98WO-US005419.
 XX
 PR 20-MAR-1997; 97US-0041057P.
 XX
 PA (VARI-) VARIAGENICS INC.
 XX
 PI Housman D, Ledley FD, Stanton VP;
 XX
 DR WPI; 1998-521232/44.
 XX
 XX Identifying target genes for allele-specific drugs - used for diagnosis,
 PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,
 PT dysplastic lesions, endometriosis or graft versus host disease.
 XX
 PS Disclosure; Fig 7; 605pp; English.
 XX
 CC This invention describes a novel method for identifying an inhibitor
 CC potentially useful for treatment of cancer, where the inhibitor is active
 CC on a gene vital for cell growth or viability, and where the gene is
 CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
 CC used for preventing the development of cancer in a patient having a
 CC precancerous condition, by administering to the patient a first allele
 CC specific inhibitor (ASI) targeted to an allele of a first essential gene
 CC present in cells of the precancerous condition, where the normal somatic
 CC cells of the patient are heterozygous for the first gene, the inhibitor
 CC is active on at least one but less than all allelic forms of the gene
 CC present in a population and targets only one allelic form present in the
 CC normal somatic cells, and the first gene. The products and methods can be
 CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.
 CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
 CC lesions, benign tumours, endometriosis, polycystic kidney disease, and
 CC graft versus host disease. The method can also be used to remove

CC malignant cells from bone marrow transplants. AA225812-Z26825 represent
 CC human polymorphic sites described in the method of the invention
 XX
 SQ Sequence 21 BP; 4 A; 1 C; 15 G; 1 T; 0 U; 0 Other;
 Query Match 0.3%; Score 16.2; DB 1; Length 21;
 Best Local Similarity 85.7%; Pred. No. 6.8e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 229 CCTGACCTGACCTGCTGC 249
 Db 21 CCTCCCCCTGACCTCTCTCC 1

RESULT 482
 AAX81302
 ID AAX81302 standard; DNA; 21 BP.
 AC AAX81302;
 XX
 XX 20-AUG-1999 (first entry)
 DT
 DE 3' ribonucleoside oligonucleotide probe CP-1.
 XX
 XX Microelectronic device; multi-step reaction; microscopic format;
 KW ion-permeable permeation layer; electrode; electrical control; transport;
 KW attachment; binding; DNA/RNA hybrid; probe; ss.
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH misc_RNA 21
 FT /tag= a
 XX
 XX MO99292711-A1.
 PN 17-JUN-1999.
 PD
 XX 01-DEC-1998; 98WO-US025475.
 PF
 XX 05-DEC-1997; 97US-00986065.
 PR
 XX (NANO-) NANOGEN INC.
 PA
 XX Sosnowski RG, Butler WF, Tu E, Nerenberg MI, Heller MJ, Edman CF;
 PI WPI; 1999-385567/32.
 DR
 XX New microelectronic device designed to carry out and control multi-step
 PT and multiplex molecular biological reactions in microscopic format.
 PS Example 1; Page 89; 179pp; English.
 XX
 CC The specification describes a self-addressable, self-assembling
 CC microelectronic device which is designed to actively carry out and
 CC control multi-step and multiplex molecular biological reactions in
 CC microscopic formats. A key aspect of this invention is played by the ion
 CC permeable permeation layer which overlies the electrode. This permeation
 CC layer allows attachment of nucleic acids to permit immobilization but
 CC also separates the attached oligonucleotides and hybridized target DNA
 CC sequences from the highly reactive electrochemical environment generated
 CC immediately at the electrode surface. The microelectronic device is
 CC designed and fabricated to actively carry out and control reactions such
 CC as nucleic acid hybridizations, antibody/antigen reactions, sample
 CC preparation, diagnostics and biopolymer synthesis. The device can
 CC electronically control the transport and attachment of specific binding
 CC entities, such as nucleic acids and polypeptides, to specific micro-
 CC locations. The device can subsequently control the transport and reaction
 CC of analytes or reactants at the addressed specific micro-locations. The
 CC device is able to concentrate analytes and reactants, remove non-
 CC specifically bound molecules, provide stringency control for DNA
 CC hybridization reactions and improve the detection of analytes. The
 CC present sequence represents a probe used to exemplify the invention

XX
 SQ Sequence 21 BP; 20 A; 0 C; 0 G; 0 T; 1 U; 0 Other;
 Query Match 0.3%; Score 16.2; DB 1; Length 21;
 Best Local Similarity 81.0%; Pred. No. 6.8e+02;
 Matches 17; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
 QY 5396 AAAATGACAAAAAGAAAAAT 5416
 Db 1 AAAAAAAAAAAAAAAAAAAAAAU 21

RESULT 483
 AAX25057
 ID AAX25057 standard; DNA; 21 BP.
 AC AAX25057;
 XX
 XX 05-JUL-1999 (first entry)
 DT
 DE Human atrial natriuretic factor ANF gene PCR primer.
 XX
 XX Atrial natriuretic factor; ANF gene; atrial natriuretic peptide; human;
 KW ischaemic stroke; therapy; diagnosis; PCR; primer; ss.
 OS Synthetic.
 OS Homo sapiens.
 XX
 XX MO9908510-A1.
 PN 25-FEB-1999.
 PD
 XX 20-AUG-1998; 98WO-US017250.
 PF
 XX 21-AUG-1997; 97US-00916043.
 PR
 XX (CUPRA-) CUPAGEN CORP.
 PA
 XX Shinketsu RA;
 PI
 XX WPI; 1999-254213/21.
 DR
 XX A new mutant of atrial natriuretic factor.
 PT
 XX Disclosure; Page 13; 85pp; English.
 PS
 XX
 CC Primers having the present sequence, and the sequence given in AAX25058,
 CC are used in the PCR amplification of the human atrial natriuretic factor
 CC (ANF) gene (see AAX25054) from a genomic or cDNA library. The invention
 CC provides methods for using mutant ANF (especially human mutant ANF in
 CC which Gly-1 is replaced by Ser, Thr or Tyr, see AA98194-96), fragments,
 CC analogues, derivatives and homologues of mutant ANF proteins, the nucleic
 CC acids encoding these mutant ANF proteins, as well as modulators of ANF
 CC for treating or preventing ischaemic diseases, especially ischaemic
 CC stroke. The invention also relates to methods of diagnosis, prognosis and
 CC screening for genetic predisposition for diseases and disorders
 CC associated with increased levels of ANF. Pharmaceutical compositions, and
 CC methods of screening for ANF alleles that are protective for stroke, and
 CC prevention of ischaemic stroke are also provided
 CC
 XX
 SQ Sequence 21 BP; 2 A; 5 C; 7 G; 7 T; 0 U; 0 Other;
 Query Match 0.3%; Score 16.2; DB 1; Length 21;
 Best Local Similarity 85.7%; Pred. No. 6.8e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 5146 GAAACATTGCTGCTGCTG 5166
 Db 1 GGATCATTTGTCGCGGCTG 21

RESULT 484


```

AA26973/c
ID AAX26973 standard; cDNA; 21 BP.
XX
AC AAX26973;
XX
DT 25-JUN-1999 (first entry)
XX
DE Primer used to reverse transcribe mamaglobin RNA.
XX
KW Human; mammary-specific protein; mamaglobin; antigen; vaccine;
KW mamaglobin-expressing cancer; breast cancer;
XX autologous tumor lymphocyte; diagnosis; marker; primer; ss.
XX
OS Synthetic.
XX
PN WO914230-A1.
XX
PD 25-MAR-1999.
XX
PF 18-SEP-1998; 98MO-US017991.
XX
PR 18-SEP-1997; 97US-00933149.
XX
PA (UNIV ) UNIV WASHINGTON.
XX
PI Watson MA, Fleming TP;
XX
DR WPI; 1999-244021/20.
XX
PT Mamaglobin, secreted protein overexpressed in breast cancer.
XX
PS Example 2; Page 55; 60pp; English.
XX
CC The present primer was used to reverse transcribe RNA encoding a human
CC mammary-specific protein, designated mamaglobin. The specification
CC describes a protein comprising a mamaglobin antigen that is recognized
CC by B and/or Tc cells specific for the natural, secreted and glycosylated
CC form of mamaglobin polypeptide. This protein, or recombinant vectors
CC that express it, are used in vaccines for treating mamaglobin-
CC expressing cancers, specifically of the breast. Such cancers can also be
CC treated using autologous tumor lymphocytes activated ex vivo with an
CC mamaglobin antigen, then returned to the patient. Expression of
CC mamaglobin is elevated in 27% of stage I primary breast cancers, so it
CC represents a marker useful for diagnosis of this disease
XX
SQ Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match          0.3%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 6.8e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      5393 AAAAAAAAAATCAAAAGAGAAA 5413
DB      21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 485
AA259350/c
ID AA259350 standard; DNA; 21 BP.
XX
AC AA259350;
XX
DT 05-APR-2000 (first entry)
XX
DE Human STP2 gene promoter polymorphism sequence 108.
XX
KW Single nucleotide polymorphism; SNP; STP2; phenol sulphotransferase;
KW probe; genotyping; human; drug metabolism; ss.
XX
OS Homo sapiens.
XX
FH Key
FT variation      11 Location/Qualifiers

```

```

FT      1195 GAGAAATCAGAGAAAGCAGG 1215
FT      21 GAGAAAGCTGAGATAGCAGG 1
FT
FT      /tag= a
FT      /note= "Site of polymorphism"
XX
XX      WO9964630-A1.
XX
XX      16-DEC-1999.
XX
XX      09-JUN-1999; 99MO-US013094.
XX
XX      10-JUN-1998; 98US-0088710P.
XX
XX      (AXYS-) AXYS PHARM INC.
XX
XX      Guida M, Kurth J;
XX
XX      WPI; 2000-105892/09.
XX
XX      Novel nucleic acid used for genotyping, e.g. to predict rate of drug
XX      metabolism.
XX
XX      Claim 2; Page 17; 46pp; English.
XX
XX      Sequences AA259305-Z59352 are fragments of the human STP2 gene. The
XX      fragments are from the 8 exons, the promoter region, 3' and 5'
XX      untranslated regions of the STP2 gene. Each sequence contains a newly
XX      identified STP2 gene single nucleotide polymorphisms (SNP). STP2 is a
XX      phenol sulphotransferase. Substrates for STP2 include minoxidil,
XX      acetaminophen, and paracetamol. Several of the nucleotide changes
XX      identified at the polymorphism sites, give rise to an amino acid change.
XX      Amino acid changes may result in altered enzyme activity. The sequences
XX      can be used as probes for detecting STP2 polymorphisms. The polymorphic
XX      probes are used in screening and genotyping, i.e. to predict the rate of
XX      metabolism of STP2 substrates, potential drug-drug interactions and
XX      adverse side effects. They can also be used to detect diseases resulting
XX      from accidental or occupational exposure to toxins and to establish
XX      animal, cell or in vitro models for drug metabolism

SQ      Sequence 21 BP; 2 A; 9 C; 2 G; 8 T; 0 U; 0 Other;

Query Match          0.3%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 6.8e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      1195 GAGAAATCAGAGAAAGCAGG 1215
DB      21 GAGAAAGCTGAGATAGCAGG 1

RESULT 486
AA244350/c
ID AA244350 standard; DNA; 21 BP.
XX
AC AA244350;
XX
DT 04-APR-2000 (first entry)
XX
DE Protein kinase inhibiting primer #12.
XX
KW Antimicrobial; cytostatic; immunosuppressive; protein kinase;
KW prophylactic; therapy; treatment; cancer; autoimmune disease;
KW pathogenic microorganism; primer; ss.
XX
XX      Unidentified.
XX
XX      US5998596-A.
XX
XX      07-DEC-1999.
XX
XX      04-APR-1995; 95US-00416214.
XX
XX      04-APR-1995; 95US-00416214.
XX
XX      (USSH ) US DEPT HEALTH & HUMAN SERVICES.

```

```
XX Bergan R, Neckers L;
XX WPI, 2000-104623/09.
XX
XX Oligonucleotides inhibiting protein kinase, useful for treating diseases
XX such as cancer and autoimmune disease.
XX
XX Example 8; Col 27-28; 26pp; English.
XX
XX This invention describes novel purified aptameric oligonucleotides which
XX have antimicrobial, cytostatic and immunosuppressive activity. The
XX oligonucleotides are useful for binding to and preventing or inhibiting
XX the biological function of a protein kinase or a target molecule and for
XX detecting the presence or absence of a target molecule in biological
XX samples. The oligonucleotides are also useful for prophylactic and
XX therapeutic treatment of diseases such as cancer, autoimmune diseases and
XX diseases caused by pathogenic microorganisms. This sequence represents a
XX primer used in the method of the invention
XX
SQ Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match      0.3%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 6.8e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 5393 AAAAAAAAAAAGAAAA 5413
   |||||
Db 21 AAAAAAAAAAAAAAAAAA 1

RESULT 487
AAZ75999
ID AAZ75999 standard; DNA; 21 BP.
XX
XX AAZ75999;
XX
XX 10-SEP-2001 (first entry)
XX
XX Human biallelic marker downstream amplification primer SEQ ID NO:10355.
XX
XX Human genome; biallelic marker; high density disequilibrium map;
XX genomic map; haplotype; phenotype; polymorphic base; genotyping;
XX haplotyping; hybridisation; identification; characterisation;
XX amplification; single nucleotide polymorphism; SNP; PCR primer;
XX diagnosis; ss.
XX
XX Homo sapiens.
XX
XX WO9954500-A2.
XX
XX 28-OCT-1999.
XX
XX 21-APR-1999; 99WO-IB000822.
XX
XX 21-APR-1998; 98US-0082614P.
XX 23-NOV-1998; 98US-0109732P.
XX
XX (GEST ) GENSET.
XX
XX Cohen D, Blumenfeld M, Chumakov I;
XX
XX WPI, 2000-013267/01.
XX
XX Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX
XX Claim 9; Page 2438; 2745pp; English.
XX
XX AA65654 to AA69578 represent human biallelic markers from the present
XX invention, which contain a polymorphic base at position 24 of their
XX nucleotide sequences. AA69579 to AAZ77440 represent amplification
XX primers for the biallelic markers. The biallelic markers of the invention
```

```
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
SQ Sequence 21 BP; 6 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match      0.3%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 6.8e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 5184 CAAATTGGGCTTCAGCGTCG 5204
   |||||
Db 1 CAAATTGGGCTTCAGCATCG 21

RESULT 488
AAF96956/C
ID AAF96956 standard; DNA; 21 BP.
XX
XX AAF96956;
XX
XX 06-JUN-2001 (first entry)
XX
XX Human gene single nucleotide polymorphism #1717.
XX
XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
XX polymorphism; vascular disease; coronary artery disease; forensics;
XX myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
XX pulmonary embolism; paternity test; ds.
XX
XX Homo sapiens.
XX
XX FH Key Location/Qualifiers
XX FT Variation replace(11,A)
XX FT /*tag= a
XX FT /standard_name= "single nucleotide polymorphism"
XX
XX WO200118250-A2.
XX
XX 15-MAR-2001.
XX
XX 07-SEP-2000; 200WO-US024503.
XX
XX 10-SEP-1999; 99US-0153357P.
XX 26-JUL-2000; 2000US-0220947P.
XX 16-AUG-2000; 2000US-0225724P.
XX
XX (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX PA (MILL-) MILLENNIUM PHARM INC.
XX
XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, McCarthy JJ;
XX
XX WPI, 2001-226749/23.
XX
XX Nucleic acids comprising single nucleotide polymorphisms, useful in
XX applications such as forensics, paternity testing, medicine, genetic
XX analysis and phenotype correlations to diseases such as diabetes and
XX atherosclerosis.
XX
XX Example; Page 163; 242pp; English.
XX
XX The present invention provides a method of diagnosing a vascular disease
XX in an individual, involving determining the sequence at thrombospondin 4
XX polymorphic sites within the human thrombospondin 1 and thrombospondin 4
XX genes. The sequences at a number of polymorphic sites are also provided
```

CC in the specification. In particular, the method can be used in the
 CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
 CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
 CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
 CC useful in forensics, paternity testing, genetic analysis and phenotype
 CC correlations to diseases. The present sequence is an example of one of
 CC the human gene SNPs shown in the specification

XX
 SQ Sequence 21 BP; 8 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.2; DB 1; Length 21;
 Best Local Similarity 85.7%; Pred. No. 6.8e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2099 CCTGCACTGCTGATGTCAGC 2119
 Db 21 CCTGCACTGCTGATGTC 1

RESULT 489
 AAF99707/c
 ID AAF99707 standard; DNA; 21 BP.

AC AAF99707;
 XX
 DT 12-JUN-2001 (first entry)

DE Immunostimulatory nucleic acid #823.

XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
 KM immunostimulatory; tumour; viral infection; bacterial infection;
 KM fungal infection; parasitic infection; cancer; asthma;
 XX infectious disease; allergy; immune deficiency; phosphorothioate; ss.

OS Synthetic.

PN W0200122972-A2.

XX
 PD 05-APR-2001.

XX 25-SEP-2000; 2000WO-US026383.

XX 25-SEP-1999; 99US-0156113P.

PR 27-SEP-1999; 99US-0156135P.

PR 23-AUG-2000; 2000US-0227436P.

XX (IOWA) UNIV IOWA RES FOUND.

PA (COLE-) COLEY PHARM GMBH.

XX Kriegl AM, Schetter C, Vollmer J;

XX WPI; 2001-273485/28.

XX
 PT Vaccinating against tumore, infectious diseases, allergies and asthma
 PT using immunostimulatory Py-rich and TG nucleic acids.

XX
 PS Claim 101; Page 56; 338pp; English.

CC The present invention relates to a method for stimulating an immune
 CC response. The method comprises administering an immunostimulatory nucleic
 CC acid to a non-todent subject in sufficient quantity to stimulate an
 CC immune response. The present sequence is one such immunostimulatory
 CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
 CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
 CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
 CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
 CC haemophilus, campylobacter, clostridium, baccherichia coli and/or
 CC streptococcus), fungal antigens and/or parasitic antigens. The method is
 CC also useful for preventing cancer, asthma, infectious disease, allergy or
 CC immune deficiency. The present sequence can also be used to redirect a
 CC Th2 to a Th1 immune response and to activate immune cells. Note: the
 CC present sequence may have a phosphorothioate backbone

SQ Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.2; DB 1; Length 21;
 Best Local Similarity 85.7%; Pred. No. 6.8e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAAAGAAAA 5413
 Db 21 AAAAAAAAAAAAAAAAAAAAA 1

RESULT 490
 AAH42480/c
 ID AAH42480 standard; DNA; 21 BP.

AC AAH42480;
 XX
 DT 01-OCT-2001 (first entry)

DE Oligonucleotide used to produce branched chain compounds.

XX Branched chain compound; nucleic acid synthesis; primer extension;
 KM reverse transcription; nucleic acid hybridization;
 KM nucleic acid amplification; ss.

OS Synthetic.

PN Key location/Qualifiers

FT modified_base 1 /tag= a

FT /note= "NH2-C6 attached"

FT modified_base 4 /tag= b

FT /note= "NH2-C6 attached"

FT misc_feature 6..7 /tag= c

FT /note= "branch present"

XX
 PN EP1111068-A1.

XX 27-JUN-2001.

XX 21-DEC-1999; 99EP-00125484.

XX 21-DEC-1999; 99EP-00125484.

XX (LION-) LION BIOSCIENCE AG.

PA (VBCG-) VBC GENOMICS GMBH.

XX Schmidt W, Hiller R, Huber M, Mueller M;

XX WPI; 2001-466959/51.

XX
 PT Branched compounds useful in e.g. nucleic acid synthesis reaction
 PT comprises nucleic acid moieties optionally extended by a polymerase.

XX
 PS Example 1; Page 10; 31pp; English.

CC The specification describes branched compounds containing nucleic acid
 CC moieties optionally extended by a polymerase. The branched chain
 CC compounds of the invention are used in nucleic acid synthesis reaction,
 CC primer extension reaction, reverse transcription reaction of RNA into
 CC DNA, nucleic acid hybridization experiment (for identifying sequence of a
 CC nucleic acid), and nucleic acid amplification experiment (for analysing
 CC the expression pattern of genes). The compounds are also used in solid-
 CC phase enzymatic reactions. The present sequence was used in the course of
 CC the invention to produce branched chain compounds

XX
 SQ Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.2; DB 1; Length 21;
 Best Local Similarity 85.7%; Pred. No. 6.8e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

QY      5393 AAAAAAAAAACAAAAAGAAAA 5413
XX      |||||
XX      21 AAAAAAAAAAAAAAAAAAAAAA 1
Db

RESULT 491
AAF24290/c
ID      AAF24290 standard; DNA; 21 BP.
XX
XX      AAF24290;
AC
XX      03-APR-2001 (first entry)
XX
XX      Complementary nucleic acid detection method related sequence #5.
DE
XX      Complementary nucleic acid; gene analysis; polymorphism; variation;
KM      DNA chip; primer; ss.
XX
XX      Unidentified.
OS
XX      BP1065278-A2.
PN
XX      03-JUN-2001.
XX
XX      07-JUN-2000; 2000BP-00112235.
PF
XX      07-JUN-1999; 99JP-00159339.
PR
XX      (FUUF ) FUUI PHOTO FILM CO LTD.
PA
XX      Makino Y, Abe Y, Ogawa M, Takagi M, Takenaka S, Yamashita K;
PI      WPI; 2001-140003/15.
DR
XX      WPI; 2001-140003/15.
XX
XX      Determining complementarity of nucleotide fragment for gene analysis, by
PT      comparing flow of electric current from or to electroconductive substrate
PT      through DNA fragment, with reference obtained from its complement.
XX
XX      Example 1; Page 12; 28pp; English.
XX
XX      The present invention provides a method for analysing a nucleic acid
CC      strand to determine the degree of complementarity between two sequences.
CC      This involves the measurement of an electric current along the annealed
CC      strands compared to a standard. This is useful in the analysis of genetic
CC      polymorphisms and variation between genes
XX
SQ      Sequence 21 BP; 1 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match      0.3%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 6.8e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      5393 AAAAAAAAAACAAAAAGAAAA 5413
XX      |||||
XX      21 AAAAAAAAAAAAAAAAAAAAAA 1
Db

RESULT 492
AAF86496
ID      AAF86496 standard; DNA; 21 BP.
XX
XX      AAF86496;
AC
XX      28-JUN-2001 (first entry)
XX
XX      PCR primer MIG173.rev used to construct mutant RNase P RNA construct.
DE
XX      Gene therapy; RNase; DNA cleavage; enzyme; PCR primer; ss.
XX
XX      Synthetic.
OS
XX      WO200123548-A1.
PN

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XX      05-APR-2001.
PD
XX      29-SEP-2000; 2000WO-US026864.
PF
XX      30-SEP-1999; 99US-0156790P.
PR
XX      (UYVA ) UNITV YALE.
XX
XX      Dorit RL, Cole KB;
PI
XX      WPI; 2001-328183/34.
DR
XX      WPI; 2001-328183/34.
XX
XX      Variant of RNase P RNA molecule that specifically cleave DNA with a
PT      catalytic efficiency greater than its wild-type, useful for DNA
PT      detection, quantitation or cataloging, biostatistical methods and
PT      forensic methods.
XX
XX      Example 1; Page 47; 96pp; English.
XX
XX      The present invention relates to a variant RNase P RNA (see AAF86515),
CC      that cleaves a DNA substrate with a catalytic efficiency greater than
CC      wild-type RNase P RNA. The variant RNase P RNA is useful for cleaving a
CC      DNA substrate in a cell, which involves introducing the variant RNase P
CC      RNA and a guide sequence that hybridises to the DNA substrate of
CC      interest, into the cell, by introducing a vector encoding the variant
CC      RNase P RNA and the guide sequence as a single transcript, into the cell.
CC      Optionally RNase P protein subunit is also brought into contact with the
CC      DNA substrate of interest. The variant RNase P RNA is useful in
CC      diagnostic methods for detection, quantitation, or cataloging of DNA
CC      sequences, forensic methods, genome dissection methods, biostatistical
CC      methods, and population genetics methods, cleaving genomic DNA at
CC      particular sequences, creating gene knockouts by gene cleavage, killing
CC      specific cells by specific cleavage of DNA, cleaving pathogen DNA in a
CC      host cell, and killing mutant cells by specific cleavage of mutant DNA in
CC      the cell. The present sequence is a PCR primer used in the present
CC      invention
XX
SQ      Sequence 21 BP; 3 A; 10 C; 1 G; 7 T; 0 U; 0 Other;

Query Match      0.3%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 6.8e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      4263 CTTCCACCTTACTGATGCC 4283
XX      |||||
XX      1 CTTTCACCTTACTGATGCC 21
Db

RESULT 493
AAF86495/c
ID      AAF86495 standard; DNA; 21 BP.
XX
XX      AAF86495;
AC
XX      28-JUN-2001 (first entry)
XX
XX      PCR primer MIG173.fwd used to construct mutant RNase P RNA construct.
DE
XX      Gene therapy; RNase; DNA cleavage; enzyme; PCR primer; ss.
XX
XX      Synthetic.
OS
XX      WO200123548-A1.
PN
XX      05-APR-2001.
XX
XX      29-SEP-2000; 2000WO-US026864.
PF
XX      30-SEP-1999; 99US-0156790P.
PR
XX      (UYVA ) UNITV YALE.
PA

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PI Doric RL, Cole KB;
XX
XX WPI; 2001-328183/34.
XX
XX Variant of RNase P RNA molecule that specifically cleave DNA with a
XX PT catalytic efficiency greater than its wild-type, useful for DNA
XX PT detection, quantitation or cataloging, biostatistical methods and
XX PT forensic methods.
XX
XX Example 1; Page 47; 96pp; English.
XX
XX The present invention relates to a variant RNase P RNA (see AAF86515),
XX CC that cleaves a DNA substrate with a catalytic efficiency greater than
XX CC wild-type RNase P RNA. The variant RNase P RNA is useful for cleaving a
XX CC RNA substrate in a cell, which involves introducing the variant RNase P
XX CC RNA and a guide sequence that hybridises to the DNA substrate of
XX CC interest, into the cell, by introducing a vector encoding the variant
XX CC RNase P RNA and the guide sequence as a single transcript, into the cell.
XX CC Optionally RNase P protein subunit is also brought into contact with the
XX CC DNA substrate of interest. The variant RNase P RNA is useful in
XX CC diagnostic methods for detection, quantitation, or cataloging of DNA
XX CC sequences, forensic methods, genome dissection methods, biostatistical
XX CC methods, and population genetics methods, cleaving genomic DNA at
XX CC particular sequences, creating gene knockouts by gene cleavage, killing
XX CC specific cells by specific cleavage of DNA, cleaving pathogen DNA in a
XX CC host cell, and killing mutant cells by specific cleavage of mutant DNA in
XX CC the cell. The present sequence is a PCR primer used in the present
XX CC invention
XX
XX Sequence 21 BP; 7 A; 1 C; 10 G; 3 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.3%; Score 16.2; DB 1; Length 21;
XX Best Local Similarity 85.7%; Pred. No. 6.8e+02;
XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 4263 CTTCCACCTGACCTGATCCC 4283
XX Db 21 CTTCCACCTGACCTGATCCC 1
XX
XX RESULT 494
XX ABL39404/c
XX ID ABL39404 standard; DNA; 21 BP.
XX
XX ABL39404;
XX
XX 13-DEC-2002 (first entry)
XX
XX Angiogenesis inhibitory oligonucleotide #912.
XX
XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
XX KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
XX KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
XX KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
XX KW rubiosis; Ogler-Weber Syndrome; myocardial angiogenesis;
XX KW plaque neovascularisation; telangiectasia; haemophiliac joint;
XX KW angiodiroma; wound granulation; intestinal adhesion; atherosclerosis;
XX KW scleroderma; hypertrophic scar.
XX
XX Synthetic.
XX
XX WO200253141-A2.
XX
XX 11-JUL-2002.
XX
XX 14-DEC-2001; 2001WO-US048458.
XX
XX 14-DEC-2000; 2000US-0255534P.
XX
XX (COLE-) COLEY PHARM GROUP INC.
XX
XX Bratzler RL;
XX

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DR WPI; 2002-566690/60.
XX
XX Inhibiting angiogenesis in a subject, involves administering at least one
XX PT antiangiogenic nucleic acid molecule to the subject.
XX
XX Claim 2; Page 35; 276pp; English.
XX
XX The invention relates to inhibiting angiogenesis in a subject, comprising
XX CC administering at least one antiangiogenic nucleic acid molecule. Also
XX CC included is a kit comprising a first container housing the antiangiogenic
XX CC nucleic acids, and instructions for administering them to a subject
XX CC having a condition characterised by unwanted angiogenesis. The method is
XX CC useful for inhibiting angiogenesis associated with solid tumour growth,
XX CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
XX CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
XX CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
XX CC rubiosis, Ogler-Weber Syndrome, myocardial angiogenesis, plaque
XX CC neovascularisation, telangiectasia, haemophiliac joint, angiodiroma,
XX CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
XX CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
XX CC acid of the invention
XX
XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.3%; Score 16.2; DB 1; Length 21;
XX Best Local Similarity 85.7%; Pred. No. 6.8e+02;
XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 5393 AAAAAAAAAATCAAAAGAAAA 5413
XX Db 21 AAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 495
XX ABL39404/c
XX ID ABL39404 standard; DNA; 21 BP.
XX
XX ABL39404;
XX
XX 16-APR-2002 (first entry)
XX
XX Immunostimulatory nucleic acid SEQ ID NO: 840.
XX
XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
XX KW angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX FT modified_base 1..21
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate backbone"
XX
XX WO200197843-A2.
XX
XX 27-DEC-2001.
XX
XX 22-JUN-2001; 2001WO-US020154.
XX
XX 22-JUN-2000; 2000US-0213346P.
XX
XX (IOWA ) UNIV IOWA RES FOUND.
XX
XX Weiner G, Hartmann G;
XX
XX WPI; 2002-154611/20.
XX
XX Treating or preventing cancer, such as basal cell carcinoma, comprises
XX PT administering immunostimulatory nucleic acids that induce expression of
XX PT cell surface antigens and antibodies to a subject having or at risk of
XX PT developing cancer.
XX

```

PS Disclosure; Page 309; 312pp; English.

XX The present invention relates to methods for treating or preventing
CC cancer, involving administering to a subject having or at risk of
CC developing cancer immunostimulatory nucleic acids that induce expression
CC of cell surface antigens and antibodies. The methods are useful for
CC treating or preventing cancer such as basal cell carcinoma, bladder
CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
CC breast cancer, cervical cancer, colon and rectum cancer, connective
CC tissue cancer, esophageal cancer, eye cancer, kidney cancer, larynx
CC cancer, leukemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
CC present sequence is an immunostimulatory oligonucleotide described in the
CC exemplification of the invention

SQ Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 6.8e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAACAAAGAAA 5413
|||||
Db 21 AAAAAAAAAAAAAAAAAA 1

RESULT 496
AAD30438/c
ID AAD30438 standard; DNA; 21 BP.
XX AAD30438;
AC
XX
DT 21-MAY-2002 (first entry)
XX
DE Human androgen receptor (AR) polypeptide tract encoding DNA.
XX
XX Human; AIB1, amplified in breast cancer 1; androgen receptor; AR;
KM prostate cancer; polypeptide; ds.
XX
XX Homo sapiens.
OS
XX
XX WO200210452-A2.
PN
XX
PD 07-FEB-2002.
XX
PF 27-JUL-2001; 2001MO-US023834.
XX
PR 27-JUL-2000; 2000US-0221074P.
XX
PA (UVRP) UNIV ROCHESTER.
XX
XX Chang C;
PI
XX
DR WPI; 2002-206195/26.
XX
PT Assessing the risk of acquiring or developing prostate cancer in a human
PT subject, comprises determining the length of the contiguous CAG, CAA
PT and/or GGN repeats in the AIB1 gene and/or androgen receptor gene of the
PT subject.
XX
XX Example 2; Page 45; 86pp; English.

CC The invention relates to a method for assessing the risk of prostate
CC cancer in a human subject. The method involves determining the length of
CC the contiguous CAG or CAA repeats in both AIB1 (Amplified in Breast
CC cancer 1) gene alleles or contiguous CAG, CAA or GGN repeats in the
CC androgen receptor gene of the subject. The method is useful for assessing
CC a subject's risk for acquiring or developing prostate cancer. The present
CC sequence is a DNA encoding human androgen receptor (AR) polypeptide
CC tract. This sequence is used in the molecular analysis and assessment of
CC the CAG and GGN repeat of AR gene

XX Sequence 21 BP; 0 A; 1 C; 15 G; 5 T; 0 U; 0 Other;

SQ

Query Match 0.3%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 6.8e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1262 GCCTACAGCCGACACGACC 1282
|||||
Db 21 GCCACGACCCGACGACGACC 1

RESULT 497
ABX79794/c
ID ABX79794 standard; cDNA; 21 BP.
XX
XX ABX79794;
AC
XX
DT 17-APR-2003 (first entry)
XX
DE EST polymorphic DNA repeat polynucleotide #119.
XX
XX EST, expressed sequence tag; ss; polymorphic repeat; tandem repeat;
KM polymorphic marker prediction of ubiquitous simple sequences; POMPOUS;
KM Rep-X; human; genetic disease; drug-treatment; Machado-Joseph;
KM Haw River syndrome; Huntington's disease; fragile-X syndrome;
KM Friedreich's ataxia; myotonic dystrophy; hyperandrogenemia;
KM spinal atrophy; bulbar atrophy; spinocerebellar ataxia.
XX
XX Homo sapiens.
OS
XX
XX US6472154-B1.
PN
XX
PD 29-OCT-2002.
XX
PF 31-DEC-1999; 99US-00475947.
XX
PR 31-DEC-1999; 99US-00475947.
XX
PA (TEXA) UNIV TEXAS SYSTEM.
XX
PI Garner HR, Wren JD, Minna JD, Fondon JW;
XX
XX WPI; 2003-208818/20.
DR
XX
XX Identifying a candidate polymorphic repeat within a coding sequence, for
PT understanding or treating genetic disease, comprises detecting tandem
PT repeats in a target coding sequence and scoring the repeats for
PT polymorphic probability.
XX
XX Example; Col 495; 588pp; English.

CC The invention discloses a method for identifying a candidate polymorphic
CC repeat within a coding sequence (expressed sequence tag, EST), which
CC comprises detecting tandem repeats in a target coding sequence, scoring
CC the repeats for polymorphic probability and generating a dataset
CC correlating the repeats with polymorphic probability to identify a
CC candidate polymorphic repeat. The computational methods (polymorphic
CC marker prediction of ubiquitous simple sequences, POMPOUS, and Rep-X) are
CC useful for identifying and detecting candidate polymorphic repeats in
CC human genes, which can be used to understand, treat or eliminate genetic
CC diseases, predispositions or adverse drug-treatment reactions. Examples
CC of diseases linked to nucleotide repeats are Machado-Joseph, Haw River
CC syndrome, Huntington's disease, fragile-X syndrome, Friedreich's ataxia,
CC myotonic dystrophy, hyperandrogenemia, spinal and bulbar atrophy and
CC spinocerebellar ataxia. The sequences presented in ABX79676-ABX80022 are
CC the polymorphic repeats identified for a search of human ESTs

SQ Sequence 21 BP; 1 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 6.8e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAAGAAA 5413
 DB 21 AAAAAAAAAA 1

RESULT 498

ID AAD51323/c
 AC AAD51323 standard; DNA; 21 BP.

XX AAD51323;
 XX 16-APR-2003 (first entry)

DE Regular oligo dt primer used to illustrate the method of the invention.

XX Laminitis; viral disease; vaccine; bacterial disease; primer; epistaxis;
 KW gastritis; gastric ulcer; respiratory ailment; fracture; joint disease;
 KM musculoskeletal damage; ss.

XX Unidentified.

XX WO200290579-A1.

XX 14-NOV-2002.

XX 03-MAY-2002; 2002WO-AU000553.

XX 04-MAY-2001; 2001AU-00004809.

XX 29-JUN-2001; 2001US-00896941.

XX (GENO-) GENOMICS RES PARTNERS PTV LTD.

XX Brandon RB;

XX MPI; 2003-120558/11.

XX Assessing condition e.g. athletic ability, stage of disease, presence of
 PT drugs, response to exercise, response to vaccines, therapies, nutritional
 PT states, of performance animal involves analyzing nucleic acid expression.

XX Disclosure; Page 46; 87pp; English.

XX The invention relates to a method for assessing a condition of a
 CC performance animal. The method involves determining in sample abundance
 CC of expressed target nucleic acid; transmitting digital sample signal to
 CC remote diagnostic server; processing digital sample signal at remotely
 CC located database to correlate digital signal with digital information and
 CC returning report of particular condition of animal. The method is useful
 CC for assessing a condition of a performance animal preferably human, dog
 CC or camel. The condition can be an athletic ability and a condition that
 CC enhances, hinders, impedes or does not change an expected ability of the
 CC performance animal, and also normal, pre-clinical, overt progress and/or
 CC stage of disease, undiagnosed or unclassified conditions, presence of
 CC drugs, response to exercise, response to vaccines, therapies, nutritional
 CC states and response to environmental conditions. Diseases assessed by the
 CC invention include laminitis, lameness, viral or bacterial disease,
 CC gastritis, gastric ulcer, respiratory ailments, fractures, epistaxis,
 CC musculoskeletal damage or disorders and joint diseases. The present
 CC sequence is a primer used to illustrate the method of the invention
 XX

XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.2; DB 1; Length 21;

Best Local Similarity 85.7%; Pred. No. 6.8e+02;

Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAAGAAA 5413

DB 21 AAAAAAAAAA 1

RESULT 499

ACC48167
 ID ACC48167 standard; DNA; 21 BP.
 AC ACC48167;

XX 04-AUG-2003 (first entry)

DE R. araucariae epoxide hydrolase cDNA amplifying primer P60315N.

XX Stereoselective; 2,3-dihydroxy-carboxylic acid; 2,3-epoxy-carboxylic acid;
 KW hydrolysis; epoxide hydrolase; chiral building block; PCR primer; ss.

XX Rhodotorula araucariae.

XX EP1291436-A1.

XX 12-MAR-2003.

XX 11-SEP-2001; 2001EP-00120796.

XX 11-SEP-2001; 2001EP-00120796.

XX (FARB) BAYER AG.

XX (KERJ) FORSCHUNGSZENTRUM JUELICH GMBH.

XX Wandrey C, De Oliveira Vilela Filho M, Liese A, De Bont JM;

XX Verdoes JC, Weijers CAGM, Visser JH, Dreisbach C;

XX MPI; 2003-423171/40.

XX Stereoselective preparation of 2,3-dihydroxy-carboxylic acids, useful as
 PT chiral building blocks, comprises hydrolysis of 2,3-epoxy-carboxylic acids
 PT in the presence of a polypeptide having epoxide hydrolase activity.

XX Example 4; Page 7; 19pp; English.

XX The invention relates to stereoselective preparation of 2,3
 CC dihydroxy-carboxylic acids and derivatives and involves hydrolysis of 2,3-
 CC epoxy-carboxylic acids or derivatives in the presence of a polypeptide
 CC having epoxide hydrolase activity. The 2,3-dihydroxy-carboxylic acids are
 CC used as chiral building blocks for more complex biologically active
 CC compounds. The reaction conditions are mild and the racemic epoxide
 CC starting materials are readily available. The present sequence represents
 CC a PCR primer for amplifying an epoxide hydrolase cDNA from R. araucariae
 CC strain CBS 6031

XX Sequence 21 BP; 2 A; 8 C; 4 G; 7 T; 0 U; 0 Other;

XX Query Match 0.3%; Score 16.2; DB 1; Length 21;
 XX Best Local Similarity 85.7%; Pred. No. 6.8e+02;
 XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 293 CTTGAGTGTCTTGAGGCC 313

DB 1 CTTGAGTGTCTTGAGGCC 21

XX 293 CTTGAGTGTCTTGAGGCC 313

XX 1 CTTGAGTGTCTTGAGGCC 21

XX RESULT 500

XX ACH03246/c

XX ID ACH03246 standard; DNA; 21 BP.

XX ACH03246;

XX 25-SEP-2003 (first entry)

XX Immunostimulatory nucleic acid #881.

XX Immunostimulatory nucleic acid #881.

XX Immunostimulatory; anti-inflammatory; dermatological; antiparasitic;
 KW antitumor; gene therapy; vaccine; non-allergic inflammatory disease;
 KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
 KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.

XX Synthetic.

RESULT 500

```
XX XX US2003050268-A1.
XX PD 13-MAR-2003.
XX PS
XX PF 29-MAR-2002; 2002US-00112653.
XX PR 29-MAR-2001; 2001US-0279642P.
XX PA (KRIE/) KRIEG A M.
XX PA (BERG/) BERG D J.
XX PI Krieg AM, Berg DJ;
XX DR WPI; 2003-521815/49.
XX PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
XX PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
XX PT disease by administering an immunostimulatory nucleic acid.
XX PS Disclosure; Page 33; 229pp; English.
XX CC The invention describes a method of treating non-allergic inflammatory
XX CC disease comprising administering to a subject having or at risk of
XX CC developing a non-allergic inflammatory disease an immunostimulatory
XX CC nucleic acid for prevention or treatment of the disease. The method is
XX CC useful for treating non-allergic inflammatory diseases, such as
XX CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
XX CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
XX CC This sequence represents an immunostimulatory nucleic acid
XX SQ Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 16.2; DB 1; Length 21;
XX Best Local Similarity 85.7%; Pred. No. 6.8e+02;
XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAACAAAAAGAAAA 5413
DB 21 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 501
ADB37209/C
ID ADB37209 standard; DNA; 21 BP.
XX
XX AC ADB37209;
XX DT 04-DEC-2003 (first entry)
XX DX Immunostimulatory nucleic acid #823.
XX KW de; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX KW hypo-responsive subject; immunostimulatory.
XX OS Synthetic.
XX PN US2003087848-A1.
XX PD 08-MAY-2003.
XX PF 02-FEB-2001; 2001US-00776479.
XX PR 03-FEB-2000; 2000US-0179991P.
XX PA (BRAT/) BRATZLER R L.
XX PA (PETER/) PETERSEN D M.
XX PA (FOUR/) FOURON Y.
XX PI Bratzler RL, Petersen DM, Fouron Y;
XX WPI; 2003-657977/62.
XX
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PT Treating and/or preventing allergy or asthma using an immunostimulatory
XX nucleic acid alone or in combination with an asthma/allergy medication.
XX PS Disclosure; Page 17; 221pp; English.
XX CC The invention relates to a method of treating or preventing allergy or
XX CC asthma which comprises administering to a subject a poly-G nucleic acid
XX CC in an aerosol formulation. The methods and compositions of the present
XX CC invention are useful for diagnosing and/or treating asthma and allergy
XX CC especially in a hypo-responsive subject. The present sequence represents
XX CC an immunostimulatory nucleic acid of the invention.
XX SQ Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 16.2; DB 1; Length 21;
XX Best Local Similarity 85.7%; Pred. No. 6.8e+02;
XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAACAAAAAGAAAA 5413
DB 21 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 502
ADJ92252
ID ADJ92252 standard; DNA; 21 BP.
XX
XX AC ADJ92252;
XX DT 06-MAY-2004 (first entry)
XX DX Human hair keratin-associated-protein PCR primer P3 SEQ ID NO:111.
XX KW hair; keratin-associated protein; KAP; human; keratin; toiletry;
XX KW therapeutic; hair growth promoter; hair disorder; PCR; primer; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO2003042387-A1.
XX PD 22-MAY-2003.
XX PF 13-NOV-2002; 2002WO-JP011851.
XX PR 13-NOV-2001; 2001JP-00348050.
XX PA (UYKE-) UNIV KEIO.
XX PA (NIPR-) JAPAN SOC PROMOTION SCT.
XX PI Kudo J, Shibuya K, Shimizu N;
XX WPI; 2003-493307/46.
XX DR DNAs encoding 39 Keratin-associated proteins localized on human
XX PT chromosome 21, useful for screening binding and expression modifiers and
XX PT as cosmetic and therapeutic agents for hair disorders.
XX PS Example 3; SEQ ID NO 111, 352pp; Japanese.
XX CC The present invention describes DNAs encoding hair keratin-associated
XX CC proteins (KAP) of human origin, which bind to hair keratin. Also
XX CC described: (1) DNA encoding KAPs of mouse origin; (2) proteins encoded by
XX CC the human and mouse DNA, and their partial peptides, and proteins derived
XX CC from them by addition, deletion and/or substitution of one or more amino
XX CC acid residues; (3) DNA hybridizing to the DNA encoding KAP; (4) peptides
XX CC SCXKPSCKXP (11), where X = Q, V, R or I, and YGKGYGSGY (11), where X = Y,
XX CC L or F; (5) fusion proteins and peptides containing these proteins and
XX CC peptides together with a marker protein or peptide; (6) antibodies to the
XX CC proteins and peptides; (7) recombinant proteins and peptides binding to
XX CC these antibodies; (8) expression vectors containing the DNA encoding KAP;
XX CC (9) host cells transformed by these vectors; (10) non-human animals which
XX CC are knockout animals for KAP or which overexpress KAP; (11) screening
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CC substances promoting or inhibiting the binding of KAP to hair keratin, or
 CC promoting or inhibiting the expression of KAP, comprising using KAP or
 CC their partial peptides or cells expressing them; (12) compounds
 CC identified by the screening method; and (13) colliery and therapeutic
 CC compositions containing these compounds, or containing KAP or their
 CC partial peptides or (1) or (11), expression vectors for them, or host
 CC cells transformed by these vectors. KAP sequences can be used as hair
 CC growth promoters. The KAPs are useful as active ingredients in colliery
 CC compositions (such as hair and beard growth improvers, hair colourants
 CC and hair conditioners) and in therapeutic compositions for hair
 CC disorders. The present sequence is used in the exemplification of the
 CC present invention.

SQ Sequence 21 BP; 5 A; 10 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.2; DB 1; Length 21;

Best Local Similarity 85.7%; Pred. No. 6.8e+02;

Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3935 AGATCAACCCAGCAGCT 3955

DB 1 AGCTCAACCCAGCAGCT 21

RESULT 503
 ADK01309/C
 ID ADK01309 standard; DNA; 21 BP.

AC ADK01309;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #29.

AS; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

PN DE10208794-A1.

PD 04-SEP-2003.

PF 28-FEB-2002; 2002DE-01008794.

PR 28-FEB-2002; 2002DE-01008794.

PA (DEGS) DEGUSA BIOACTIVES GMBH.

PI Boekenkamp D, Dieck HT, Hoppe H;

PA WPI; 2003-714082/68.

Sorting single-stranded nucleic acid, useful for analyzing expression
 patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

Example; Page 5; 8pp; German.

CC This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-

CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (1) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (11) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

SQ Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.2; DB 1; Length 21;

Best Local Similarity 85.7%; Pred. No. 6.8e+02;

Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5400 TACCAAAAAGAAAAATGAAA 5420

DB 21 TACCAAAAAGAAAAATGAAA 1

RESULT 504
 ADK01344/C
 ID ADK01344 standard; DNA; 21 BP.

AC ADK01344;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #64.

AS; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

PN DE10208794-A1.

PD 04-SEP-2003.

PF 28-FEB-2002; 2002DE-01008794.

PR 28-FEB-2002; 2002DE-01008794.

PA (DEGS) DEGUSA BIOACTIVES GMBH.

PI Boekenkamp D, Dieck HT, Hoppe H;

PA WPI; 2003-714082/68.

Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

Example; Page 6; 8pp; German.

CC This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region

CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

CC Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

CC Query Match 0.3%; Score 16.2; DB 1; Length 21;

CC Best Local Similarity 85.7%; Pred. No. 6.8e+02;

CC Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 5393 AAAAAATACAAAAAGAAA 5413

DB 21 AAAAAAAAAAAAAAAAAAAAA 1

RESULT 505

ID ADK01284/C

ADK01284 standard; DNA; 21 BP.

AC ADK01284;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #4.

KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;

KW blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

PN DE10208794-A1.

PD 04-SEP-2003.

PF 28-FEB-2002; 2002DE-01008794.

PR 28-FEB-2002; 2002DE-01008794.

PA (DEGS) DEGUSSA BIOACTIVES GMBH.

PI Boekenkamp D, Dieck HT, Hoppe H;

DR WPI; 2003-714082/68.

PT Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

PS Example; Page 4; 8pp; German.

CC This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at

CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

CC Sequence 21 BP; 2 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

CC Query Match 0.3%; Score 16.2; DB 1; Length 21;

CC Best Local Similarity 85.7%; Pred. No. 6.8e+02;

CC Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 5390 ATTAAAAATACAAAAAGA 5410

DB 21 ATTTAAAAAAAAAAAAAAAAAAA 1

RESULT 506

ID ADK01341/C

ADK01341 standard; DNA; 21 BP.

AC ADK01341;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #61.

KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;

KW blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

PN DE10208794-A1.

PD 04-SEP-2003.

PF 28-FEB-2002; 2002DE-01008794.

PR 28-FEB-2002; 2002DE-01008794.

PA (DEGS) DEGUSSA BIOACTIVES GMBH.

PI Boekenkamp D, Dieck HT, Hoppe H;

DR WPI; 2003-714082/68.

PT Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

PS Example; Page 6; 8pp; German.

CC This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then

CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (1) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (11) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

CC
 XX Sequence 21 BP, 1 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.2; DB 1; Length 21;
 Best Local Similarity 85.7%; Pred. No. 6.8e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5392 TAAAAAATACAAAAAGAA 5412
 Db 21 TAAAAAATACAAAAAGAA 1

RESULT 507
 ADK01329/c
 ID ADK01329 standard; DNA; 21 BP.
 XX
 AC ADK01329;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Rat DNA microarray capture oligonucleotide #49.
 XX
 KM ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KM blood; nerve; germ cell; food additive; food supplement.
 XX
 OS Rattus sp.
 XX
 PN DE10208794-A1.
 XX
 PD 04-SEP-2003.
 XX
 PF 28-FEB-2002; 2002DE-01008794.
 XX
 PR 28-FEB-2002; 2002DE-01008794.
 XX
 PA (DEGS) DEGUSA BIOACTIVES GMBH.
 XX
 PI Boekenkamp D, Dieck HT, Hoppe H;
 XX
 DR WPI; 2003-714082/68.
 XX
 PT Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 XX and constant regions.
 XX

PS Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (1) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (11) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

CC
 XX Sequence 21 BP, 2 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.2; DB 1; Length 21;
 Best Local Similarity 85.7%; Pred. No. 6.8e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5391 TTTAAAAAATACAAAAAGAA 5411
 Db 21 TTTAAAAAATACAAAAAGAA 1

RESULT 508
 ADK01336/c
 ID ADK01336 standard; DNA; 21 BP.
 XX
 AC ADK01336;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Rat DNA microarray capture oligonucleotide #56.
 XX
 KM ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KM blood; nerve; germ cell; food additive; food supplement.
 XX
 OS Rattus sp.
 XX
 PN DE10208794-A1.
 XX
 PD 04-SEP-2003.
 XX
 PF 28-FEB-2002; 2002DE-01008794.
 XX
 PR 28-FEB-2002; 2002DE-01008794.
 XX
 PA (DEGS) DEGUSA BIOACTIVES GMBH.
 XX
 PI Boekenkamp D, Dieck HT, Hoppe H;
 XX
 DR WPI; 2003-714082/68.
 XX

PT Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 CC and constant regions.

XX Example; Page 6; 8pp; German.

CC This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADM01281-ADM01344 represent
 CC capture probes used in the method of the invention.

CC Sequence 21 BP; 0 A; 0 C; 1 G; 20 T; 0 U; 0 Other;

SO Query Match 0.3%; Score 16.2; DB 1; Length 21;
 Best Local Similarity 85.7%; Pred. No. 6.8e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5401 ACACAAAAGAAAAATGAAAA 5421

DB 21 ACACAAAAGAAAAATGAAAA 1

RESULT 509
 ADJ13120/c
 ID ADJ13120 standard; DNA; 21 BP.

XX ADJ13120;

DT 20-MAY-2004 (first entry)

DE Human DNA probe used to immobilise Cpg methylated DNA segid 247.

XX probe; ss; chemical modification; methylation; array; Cpg island;
 KW tumour suppressor; p16; human; H69; H1618.

OS Homo sapiens.

XX US2003152950-A1.

XX 14-AUG-2003.

XX 27-JUN-2002; 2002US-00184085.

XX 27-JUN-2001; 2001US-0301370P.

XX (GARNER) GARNER H R.

PA (MINN/) MINNA J D.

PA (LUEBKE) LUEBKE K J.

PA (BALOG) BALOG R P.

XX Garner HR, Minna JD, Luebke KJ, Balog RP;

XX WPI, 2003-874843/81.

XX Analysis of chemical modification of DNA involves obtaining sample of DNA
 PT to be analyzed, treating DNA with chemical reagents that result in
 PT different base sequences, and determining sequence of resulting DNA.

XX Example 1; SEQ ID NO 247; 210pp; English.

CC This invention relates to a novel method for analysing chemically
 CC modified macromolecules. Specifically, it refers to a high throughput
 CC method for the parallel analysis of many potential sites of chemical
 CC modification (e.g. methylation) in DNA. The present invention describes
 CC treating the DNA with one or more chemical reagents that result in the
 CC different base sequences depending upon the presence or absence of the
 CC modification of interest. Accordingly, a device comprising an array of
 CC probes is provided to hybridise with and select the altered DNA sequences
 CC that comprise the modifications of interest such as a Cpg island. In
 CC particular, this invention refers to analysing the methylation pattern of
 CC a region of the promoter for the tumour suppressor gene p16 from two
 CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
 CC is a human DNA probe used to immobilise Cpg methylated DNA of the
 CC invention.

SO Sequence 21 BP; 3 A; 12 C; 0 G; 6 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 16.2; DB 1; Length 21;
 Best Local Similarity 85.7%; Pred. No. 6.8e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2432 TGGAGATGAGAGGGGAGAG 2452

DB 21 TGAATGATGAGAGGGGAGAG 1

RESULT 510
 ADM96310/c
 ID ADM96310 standard; DNA; 21 BP.

XX ADM96310;

DT 17-JUN-2004 (first entry)

DE Human ATP5F1 gene, RT-PCR primer #1.

XX ss; human; H+ transporting; mitochondrial ATP synthase; subunit B;
 KW isoform 1; ATP5F1; reverse transcriptase; RT-PCR; primer.

XX Synthetic.

XX US2003211483-A1.

XX 13-NOV-2003.

XX 09-MAY-2002; 2002US-00144179.

XX 09-MAY-2002; 2002US-00144179.

XX (SCHROEDER) SCHROEDER B G.

XX (CHEN) CHEN C.

XX (SCHROTH) SCHROTH G P.

XX Schroeder BG, Chen C, Schroth GP;

XX WPI, 2003-901581/82.

PT Enriching low abundance polynucleotides in a sample, useful for gene
 PT expression analysis, comprises exposing the sample to an enzymatically
 PT non-extendable nucleobase oligomer to block polymerase activity on high

abundance species.

Example 1; Page 20; 43pp; English.

The invention relates to a method of enriching a low abundance polynucleotide in a sample of polynucleotides comprising a low abundance and a high abundance polynucleotide. The method comprises exposing the sample to an enzymatically non-extendable nucleobase oligomer having a nucleobase sequence complementary to a sequence within the high abundance polynucleotide under conditions so that base pairing occurs, and subjecting the sample to conditions for polymerase extension. Preferably, the enzymatically non-extendable nucleobase oligomer does not have a ribose-containing oligomeric structure. It is a peptide nucleic acid (PNA) oligomer or is a modified nucleotide oligomer or internucleotide analogue oligomer. The modified nucleotide oligomer is selected from 2'-modified and 3'-modified nucleotide oligomers. The 2'-modified and 3'-modified nucleotide oligomers are selected from 2'-O-alkyl modified nucleotide oligomers and 3'-alkyl modified nucleotide oligomers. The 2'-O-alkyl modified nucleotide oligomers are 2'-O-methyl nucleotide oligomers. The modified nucleotide oligomer or internucleotide analogue oligomer is selected from locked nucleic acids (LNA), N³-P⁵-phosphoramidate (NP) oligomers, minor groove binder-linked-oligonucleotides (MGB-linked oligonucleotides), phosphorothioate (PS) oligomers, C1-C4 alkyolphosphonate oligomers, phosphorimidate, beta-phosphodiester oligonucleotides, and alpha-phosphodiester oligonucleotides. The C1-C4 alkyolphosphonate oligomers are methylphosphonate (MP) oligomers. The enzymatically non-extendable nucleobase oligomer is chimeric. The sample comprises more than one high abundance polynucleotide. The sample comprises RNA, and polymerase extension is by reverse transcription to yield a first strand cDNA. The method further comprises second strand cDNA synthesis. The sample is exposed to the nucleobase oligomer during the first and/or second strand cDNA synthesis. The method further comprises an amplification step, which is by polymerase chain reaction (PCR) or by in vitro transcription. The RNA is DNA, or cDNA or total cellular RNA. Alternatively, the sample comprises RNA, and polymerase extension is by DNA-dependent DNA polymerase in a PCR. The method also comprises labelling the amplified polynucleotides. The labelling is concomitant with or subsequent to amplification. The methods are useful in selective enrichment of low abundance polynucleotides in a sample. The pool of enriched polynucleotides may be used in analysing gene expression and in creating cDNA libraries. The present sequence represents a reverse transcriptase (RT)-PCR primer which was used to amplify the human import precursor of subunit B of the H+ transporting, mitochondrial ATP synthase, subunit B, isoform 1 (ATP5F1) gene.

Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 6.8e-02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0

5393 AAAAAAAAAACAAAAAGAAA 5413
|||||
21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 511
ADJ88057/c
ID ADJ88057 standard; DNA; 21 BP.
XX
XX ADJ88057;
XX
XX
XX 06-MAY-2004 (first entry)
XX
XX RT primer used in the synthesis of an artificial gene transcript.
XX
XX Selective enrichment; gene expression; RT; reverse transcriptase; primer;
XX ss.
XX
XX Unidentified.
XX
XX US2004014105-A1.

XX	22-JAN-2004.
PD	
XX	
PB	09-MAY-2003; 2003US-00435489.
XX	
PR	09-MAY-2002; 2002US-00144179.
XX	
PA	(SCHR//) SCHROEDER B G.
PA	(CHEN//) CHEN C.
PA	(SCHR//) SCHROTH G P.
XX	
PI	Schroeder BG, Chen C, Schroth GP;
XX	
DR	WPI; 2004-121562/12.
XX	
PT	Enriching low abundance polynucleotide relative to a high abundance
PT	polynucleotide in a sample, for analyzing gene expression and creating
PT	cDNA libraries, comprises blocking polymerase activity on high abundance
XX	polynucleotides.
PS	
PS	Example 1, SEQ ID NO 41; 6zpp; English.
CC	The present invention relates to methods for the selective enrichment of
CC	low abundance polynucleotides. The invention is useful for analyzing gene
CC	expression in a sample and creating cDNA libraries. The present sequence
CC	is reverse transcriptase (RT) primer used in the synthesis of an
CC	artificial gene transcript.
XX	
SQ	Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;
Query Match	0.3%; Score 16.2; DB 1; Length 21;
Best Local Similarity	85.7%; Pred. No. 6.8e+02;
Matches 18; Conservative	0; Mismatches 3; Indels 0; Gaps 0.
OY	5393 AAAAAAAAAAGGAAA 5413
DB	21 AAAAAAAAAAAAAAAAAA 1
RESULT 512	
ADM07216/c	
ID	ADM07216 standard; DNA; 21 BP.
XX	
AC	ADM07216;
XX	
DT	15-JUL-2004 (first entry)
XX	
DE	Control primer used in cDNA first strand synthesis.
XX	
KM	Double-stranded cDNA synthesis; cDNA first strand synthesis;
KM	cDNA second strand synthesis; RNA template; RNA amplification;
KM	differential gene expression; primer; ss.
OS	Synthetic.
XX	
PN	US2004081962-A1.
XX	
PD	29-APR-2004.
XX	
PF	23-OCT-2002; 2002US-00278760.
XX	
PR	23-OCT-2002; 2002US-00278760.
XX	
PA	(CHEN//) CHEN C.
PA	(SCHR//) SCHROEDER B.
PA	(BRAND//) BRANDIS J.
PA	(SCHR//) SCHROTH G.
XX	
PI	Chen C, Schroeder B, Brandis J, Schroth G;
XX	
DR	WPI; 2004-340131/31.
XX	
PT	Synthesizing double-stranded cDNA, by synthesizing a cDNA strand from RNA

PT template, removing the template and synthesising double-stranded cDNAs
PT using the cDNA as template in the presence of processive DNA polymerase
PT and random primers.
XX
XX
PS Example 1; SEQ ID NO 2; 19pp; English.
XX
XX The present invention relates to a method for synthesising double-
CC stranded cDNA, by synthesising first cDNA strands in a first reaction
CC mixture comprising reverse transcriptase, RNA template, and first strand
CC primer complementary to template, removing the template, synthesising
CC double-stranded cDNAs in a second reaction mixture comprising processive
CC DNA polymerase, DNA ligase, first cDNA strand as template and random
CC primers having a mixture of oligonucleotides having random DNA sequences.
CC Also disclosed is a method for amplifying a population of RNA molecules
CC to produce a pool of double-stranded cDNA molecules, and a kit for
CC synthesising double-stranded cDNA. The generated cDNA products are useful
CC in determining quantitative information about the genetic profile of
CC nucleic acid in original RNA sample. The method of the invention is
CC useful in differential gene expression assays for the analysis of
CC diseased and normal tissue and for large-scale correlation studies on
CC sequences, mutations, variants or polymorphisms among samples. The method
CC is efficient in synthesising improved cDNA molecules and effective in
CC generating useful quantities of an amplified cDNA product that comprises
CC a population of cDNA molecules in substantially the same relative molar
CC ratio as the RNA or mRNA starting material. The present sequence
CC represents a primer used for cDNA first strand synthesis.
XX
SQ Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 6.8e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 5393 AAAAAAAAAAGAAAA 5413
Db 21 AAAAAAAAAAAAAAAAAA 1
XX
RESULT 513
AAQ57215/c
ID AAQ57215 standard; mRNA; 22 BP.
XX
XX AAQ57215;
XX
XX 25-MAR-2003 (revised)
DT 26-JUL-1994 (first entry)
XX
XX Enzymatic RNA molecule streptomycin mRNA target sequence.
XX
XX Specific; cleavage; target RNA; protein; prophylaxis; expression;
KW inhibitor; inhibition; ribozyme; treatment; prevention; psoriasis;
KW asthma; inflammatory diseases; restenosis; cardiovascular condition;
KW hypertension; arthritis; ss.
XX
XX Synthetic.
XX
XX WO9402595-A1.
PN
XX
XX 03-FEB-1994.
PD
XX
XX 02-JUL-1993; 93WO-US006316.
PF
XX
XX 17-JUL-1992; 92US-00916763.
PR 07-DEC-1992; 92US-00987132.
PR 07-DEC-1992; 92US-00988848.
PR 07-DEC-1992; 92US-00988849.
PR 19-JAN-1993; 93US-00008895.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Sullivan SM, Draper KG;
PI
XX
XX WPI; 1994-04853/06.
DR

XX Enzymatic RNA molecules which cleave mRNA - used to treat or prevent
PT inflammatory, arthritic, stenotic or cardiovascular diseases or
PT conditions.
XX
XX
PS Claim 3; Page 18; 65pp; English.
XX
XX This is a streptomycin mRNA target sequence (nucleotide no. 455) of an
CC enzymatic RNA molecule (ribozyme) which cleaves mRNA associated with the
CC development or maintenance of osteoarthritis or other pathological
CC conditions which are mediated by metalloproteinase activation. The concn.
CC of the ribozyme necessary to effect a therapeutic treatment is lower than
CC that of an antisense oligonucleotide and the specificity of action is
CC higher. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 22 BP; 7 A; 2 C; 9 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 16.2; DB 1; Length 22;
Best Local Similarity 85.7%; Pred. No. 6.9e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy 104 CACCTCTTCAGCCTTGAG 124
Db 21 CACCTCTTCAGCCTTGAG 1
XX
RESULT 514
AAQ93472/c
ID AAQ93472 standard; RNA; 22 BP.
XX
XX AAQ93472;
XX
XX 25-MAR-2003 (revised)
DT 06-DEC-1995 (first entry)
XX
XX Hammerhead ribozyme target sequence #11.
DE
XX Hammerhead ribozyme motif; arthritis; cancer; angiogenesis; hairpin;
KW hammerhead ribozyme motif; arthritis; cancer; angiogenesis; hairpin;
KW hepatitis delta virus; group 1 intron; RNase P RNA; streptomycin; ss.
XX
XX Synthetic.
XX
XX WO9513380-A2.
PN
XX
XX 18-MAY-1995.
PD
XX
XX 10-NOV-1994; 94WO-US013129.
PF
XX 12-NOV-1993; 93US-00152487.
PR
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Draper KG, Pavco P, Mcswiggen J, Gustofson J;
PI
XX WPI; 1995-194099/25.
DR
XX
XX New enzymatic RNA molecules - which cleave mRNA of a gene encoding a
PT matrix metalloproteinase, for treating arthritis, cancer or angiogenesis.
PT
XX
XX Disclosure; Page 18; 70pp; English.
XX
XX The sequences AAQ93462-Q93494 are examples of target cleavage sequences
CC for a hammerhead ribozyme with sequence motif AAQ9453. A ribozyme, pref.
CC hammerhead, hairpin, hepatitis delta virus, group 1 intron or RNase P RNA
CC motif can be used in a composition for the treatment of arthritis, cancer
CC or angiogenesis. The ribozyme comprises between 5-45 bases complementary
CC to the target mRNA. The ribozymes (see AAQ93830-51 for examples) were
CC synthesised based on putative streptomycin mRNA target cleavage sequences
CC (AAQ93496-Q93829). (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 22 BP; 7 A; 2 C; 9 G; 0 T; 4 U; 0 Other;
XX
Query Match 0.3%; Score 16.2; DB 1; Length 22;
XX

Qy	104	CACCTCTTCGACGCTTGACG	124
Db	21	CACCTCTTCGACGCTTGACG	1
Best Local Similarity	85.7%	Pred. No. 6.9e+02.	
Matches	18;	Conservative	0; Mismatches 3; Indels 0; Gaps 0
RESULT 515			
AAK63379/c			
ID	AAK63379	standard; RNA; 22 BP.	
XX			
AC	AAK63379;		
DT	20-JUL-1999	(first entry)	
DE	Human stromelysin hammerhead target SEQ ID NO:11.		
XX			
KM	Arthritic condition; graft tolerance; immune response; target; cleavage;		
KM	hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;		
KM	stromelysin; synovial membrane; joint; arthritis; osteoarthritis;		
KM	rheumatoid arthritis; autoimmune disease; allergy; inflammation;		
XX	diagnosis; ss.		
OS	Homo sapiens.		
PN	W09618736-A2.		
XX			
PD	20-JUN-1996.		
XX			
PF	22-NOV-1995;	95MO-US015516.	
XX			
PR	13-DEC-1994;	94US-00354920.	
PR	23-DEC-1994;	94US-00363253.	
PR	23-DEC-1994;	94US-00363254.	
PR	17-FEB-1995;	95US-00390850.	
PR	20-APR-1995;	95US-00426124.	
PR	02-MAY-1995;	95US-00432874.	
PR	04-MAY-1995;	95US-00434509.	
PR	07-JUL-1995;	95US-0000951P.	
PR	07-JUL-1995;	95US-0000974P.	
PR	07-AUG-1995;	95US-00512861.	
PR	05-OCT-1995;	95US-00541365.	
XX			
PA	(RIBO-) RIBOZYME PHARM INC.		
XX			
PI	Belgelman L, Stinchcomb DR, Jarvis T, Draper K, Pavco P;		
PI	Mcswiggen J, Thompson J, Uman N, Wincott F, Matulic-Adamic J;		
PI	Kapelsky A, Thompson JD, Modak A, Burgin A;		
DR	WPI; 1996-300653/30.		
XX			
PT	Enzymatic nucleic acid molecules having a hammer-head motif - used for		
PT	the treatment of arthritis, induction of graft tolerance or treatment of		
PT	auto-immune diseases.		
XX			
PS	Example 1, Page 139; 307pp; English.		
XX			
CC	The present invention describes a novel enzymatic nucleic acid (ENA)		
CC	having a hammerhead motif (Hm) comprising: (i) at least 5 ribose residues		
CC	; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least		
CC	ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's		
CC	can inhibit collagenase and stromelysin production in the synovial		
CC	membrane of joints for the treatment or prevention of arthritis,		
CC	particularly osteoarthritis or rheumatoid arthritis. The ENA's can also		
CC	be used to treat antigen presenting cells of a donor to induce tolerance		
CC	in a recipient to an alloantigen of a donor. They can also be used for		
CC	enhancing graft tolerance or for treating autoimmune disease, and for		
CC	treating allergies and other inflammatory conditions. The ENA's can also		
CC	be used in diagnosis. Ribozyme therapy impacts on the expression of		
CC	stromelysin without introducing the non-specific effects upon gene		
CC	expression which accompany treatment with retinoids and dexamethasone.		
CC	The concentration of ribozyme required to affect a therapeutic treatment		

Query Match	0.3%;	Score 16.2;	DB 1;	Length 22;
Best Local Similarity	85.7%;	Pred. No. 6.9e+02;		
Matches 18;	Conservative 0;	Mismatches 3;	Indels 0;	Gaps 0;
104	CACCTCTTCTCAGCCTTGACG	124		
DB	21 CACCTCTTCCACGACTTTCAG	1		
RESULT 516				
ID	ABK64865			
AC	ABK64865			
XX				
XX	ABK64865;			
XX				
XX	18-JUN-2002 (first entry)			
XX				
XX	Human breast tumour amplified kinase (BRK) reverse PCR primer.			
XX				
XX	Human, BRK; breast tumour amplified kinase; cytosolic; tumour;			
XX	antiinflammatory; primer; ss.			
XX				
XX	Homo sapiens.			
XX				
XX	US6352858-B1.			
XX				
XX	05-MAR-2002.			
XX				
XX	11-SEP-2000; 2000US-00660925.			
XX				
XX	11-SEP-2000; 2000US-00660925.			
XX				
XX	(ISIS-) ISIS PHARM INC.			
XX				
XX	Cowbert LM, Preler SM;			
XX				
XX	WPI; 2002-314704/35.			
XX				
XX	New antisense compounds targeted to nucleic acids encoding breast tumor			
XX	amplified kinase, useful for modulating gene expression and treating			
XX	diseases associated with expression of breast tumor amplified kinase in			
XX	humans.			
XX				
XX	Example 13; Col 42; 35pp; English.			
XX				
XX	The invention relates to a new antisense compound (I) up to 50			
XX	nucleobases in length and which specifically hybridizes with a nucleic			
XX	acid encoding breast tumor amplified kinase (BRK) and inhibits the			
XX	expression of BRK. (I) is useful for inhibiting the expression of BRK			
XX	in human cells or tissues and for treating an animal, particularly a			
XX	human suspected of having or being prone to a disease or condition			
XX	associated with expression of BRK. (I) is useful for diagnostics,			
XX	therapeutics, prophylaxis and as research reagent and kits. (I) is useful			
XX	prophylactically to prevent or delay infection, inflammation or tumour			
XX	formation. ABK64861-ABK64908 represent human BRK coding sequences,			
XX	antisense oligonucleotides and related primers of the invention			
XX				
XX	Sequence 22 BP; 9 A; 2 C; 7 G; 4 T; 0 U; 0 Other;			
XX				
XX	Query Match	0.3%;	Score 16.2;	DB 1;
XX	Best Local Similarity	85.7%;	Pred. No. 6.9e+02;	
XX	Matches 18;	Conservative 0;	Mismatches 3;	Indels 0;
XX				
XX	162 GGAAGAATCTGAGGACACA	182		
XX	2 GGAAGAATTTGAGGACACA	22		

```
RESULT 517
AAL60163
ID AAL60163 standard; DNA; 22 BP.
XX
XX
AC AAL60163;
XX
DT 27-AUG-2003 (first entry)
XX
DE Human prostate-specific EST cluster, CW-1 amplifying primer CW74.
XX
XX
KW Novel Gene Expressed in Prostate; NGEF; prostate cancer; human; EST;
XX expressed sequence tag; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO2003042370-A2.
XX
PD 22-MAY-2003.
XX
XX
PF 13-NOV-2002; 2002WO-US036648.
XX
XX
PR 14-NOV-2001; 2001US-0336308P.
XX
XX
PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI Pastan IH, Bera TK, Wolfgang C, Lee B, Vincent J;
XX
XX
DR WPI; 2003-449573/42.
XX
XX
PT New isolated Novel Gene Expressed in Prostate polypeptide and encoding
PT nucleic acid molecule, useful for diagnosing and treating prostate
PT cancer.
XX
PS Example 2; Page 44; 74pp; English.
XX
XX
CC The invention relates to a novel polypeptide, termed Novel Gene Expressed
CC in Prostate (NGEP), which is detected in the cells of prostate. NGEF
CC antibodies are useful in detection assays, in the production of
CC immunocongjugates, such as immunotoxins, which can be used to target
CC prostate cancer. Polynucleotide encoding NGEF, or an NGEF polypeptide can
CC be used for treating prostate cancer and generate an immune response
CC against prostate cancer cells. The present sequence is a PCR primer for
CC amplification of human prostate-specific EST (expressed sequence tag)
CC cluster CW-1
XX
SQ Sequence 22 BP; 9 A; 5 C; 7 G; 1 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 16.2; DB 1; Length 22;
Best Local Similarity 85.7%; Pred. No. 6.9e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 3299 AGCTAGACCTGCAGCAGACA 3319
Db 2 AGCTAGACGAGCAGCAGACA 22
XX
RESULT 518
ADD69448
ID ADD69448 standard; DNA; 22 BP.
XX
XX
AC ADD69448;
XX
XX
DT 15-JAN-2004 (first entry)
XX
XX
DE 5' anchored (ISSR)-PCR primer - SEQ ID 6.
XX
XX
KW inter-simple sequence repeat; ISSR; SSR; PCR; primer; genotyping; plant;
XX animal; Basmati rice; ss.
XX
XX
OS Synthetic.
XX
PN WO2003085133-A2.
```

```
XX
XX
PD 16-OCT-2003.
XX
XX
PF 09-JAN-2003; 2003WO-IB000041.
XX
XX
PR 08-APR-2002; 2002IN-CH000260.
XX
XX
PA (DNAF-) CENT DNA FINGERPRINTING & DIAGNOSTICS.
XX
XX
PI Nagaraaju JG;
XX
XX
DR WPI; 2003-804317/75.
XX
XX
PT New set of inter-simple sequence repeats (ISSR)-PCR primers for
PT genotyping eukaryotes, useful for genotyping diverse genomes of plant and
PT animal systems.
XX
XX
PS Claim 1; SEQ ID NO 6; 60pp; English.
XX
XX
CC The invention relates to a novel set of inter-simple sequence repeats
CC (ISSR)-PCR primers for genotyping eukaryotes. The primers of the
CC invention may be useful for genotyping diverse genomes of plant and
CC animal systems, in particular for distinguishing Basmati rice varieties
CC from non-Basmati rice varieties and traditional Basmati rice varieties
CC from evolved Basmati rice varieties. The current sequence is that of the
CC 5' anchored (ISSR)-PCR primer of the invention.
XX
SQ Sequence 22 BP; 10 A; 0 C; 9 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 16.2; DB 1; Length 22;
Best Local Similarity 85.7%; Pred. No. 6.9e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1174 GAATCAGAGAAAGAGAGAGA 1194
Db 2 GTATGAGAGAGAGAGAGA 22
XX
RESULT 519
ACH00645
ID ACH00645 standard; DNA; 22 BP.
XX
XX
AC ACH00645;
XX
XX
DT 12-FEB-2004 (first entry)
XX
XX
DE Mammalian inverted niple associated microsatellite PCR primer #99.
XX
XX
KW Inverted niple; microsatellite; PCR; primer; ss; pig.
XX
XX
OS Mammalia.
XX
XX
PN WO2003066891-A2.
XX
XX
PD 14-AUG-2003.
XX
XX
PF 03-FEB-2003; 2003WO-EP001045.
XX
XX
PR 05-FEB-2002; 2002EP-00002632.
XX
XX
PA (FOER-) FOERDERVEREIN BIOTECHNOLOGIEFORSCHUNG DE.
XX
XX
PI Hardge T, Schellander K, Wimmers K;
XX
XX
DR WPI; 2003-671539/63.
XX
XX
PT Determining predisposition to inverted niples useful e.g. for selecting
PT breeding animals comprises detecting specific microsatellite markers.
XX
XX
PS Disclosure; Page 23; 63pp; German.
XX
XX
CC The present invention relates to the use of a nucleic acid to determine
CC the predisposition of appearance or inheritance of inverted niples,
```


CC where the nucleic acid is identical to the region of microsatellites
 CC S0200, SW2443, S0097, S0007, SW1301 or S0164 on chromosomes 6, 2, 4, 14,
 CC 1 and 3, respectively, in pigs, or homologous positions in the genomes of
 CC other mammals. The nucleic acids can be used to select pigs, breeding or
 CC farm animals that lack inverted nipples, particularly by genomic
 CC screening of many related mammals in a population. The present sequence
 CC is a PCR primer used in the exemplification of the invention to identify
 CC microsatellite markers associated with the inverted nipple phenotype
 XX
 SQ Sequence 22 BP, 10 A, 3 C, 7 G, 2 T, 0 U, 0 Other;
 Query Match 0.3%; Score 16.2; DB 1; Length 22;
 Best Local Similarity 85.7%; Pred. No. 6.9e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 3419 AGATGAGCGAGAACTGAGGG 3439
 DB 2 AGATGAGCGAGAACTCAAG 22
 RESULT 520
 ADO12376
 ID ADO12376 standard; DNA; 22 BP.
 XX
 AC ADO12376;
 XX
 DT 15-JUL-2004 (first entry)
 XX
 DE Single multiplex PCR primer #1748.
 XX
 KM 68; primer; simultaneous amplification;
 KM single multiplex polymerase chain reaction; multifactorial disease;
 KM genetic alteration; pharmacogenetic reaction; genotyping; polymorphism;
 KM gene expression profiling.
 XX
 OS Synthetic.
 XX
 PN WO2004033649-A2.
 XX
 PD 22-APR-2004.
 XX
 PF 07-OCT-2003; 2003WO-US031874.
 XX
 PR 07-OCT-2002; 2002US-0417009P.
 XX
 PA (UYNE-) UNIV NEW JERSEY MEDICINE & DENTISTRY.
 XX
 PI LI H, LI J;
 XX
 PI LI H, LI J;
 XX
 DR WPI; 2004-340914/31.
 XX
 PT Designing primers for simultaneous amplification of target DNA fragments
 PT in a single multiplex polymerase chain reaction, for high throughput
 PT multiplex DNA sequence amplification, comprises aligning two primers.
 XX
 PS Disclosure; Page 41; 120pp; English.
 XX
 CC The invention relates to a method of designing primers for simultaneous
 CC amplification of target DNA fragments in a single multiplex polymerase
 CC chain reaction by aligning a first primer and a second primer. The method
 CC comprises: (a) aligning a first primer and a second primer; and (b)
 CC selecting the first primer where the first primer at its 3' end does not
 CC contain four or more bases that are perfectly matching to the 3' end
 CC sequence of the first primer or a second primer, the first primer at its
 CC 3' end does not contain seven or more bases that are perfectly matching
 CC except one mismatch to the 3' end sequence of the first primer or the
 CC second primer, the first primer at its 3' end does not contain six or
 CC more bases that are perfectly matching to a sequence anywhere of the
 CC first primer or the second primer, and the first primer at its 3' end
 CC does not contain eleven or more bases that are perfectly matching except
 CC one mismatch to a sequence anywhere of the first primer or the second
 CC primer. The method is useful for designing primers for simultaneous
 CC amplification of target DNA fragments in a single multiplex polymerase

CC chain reaction. It is also useful in the identification of multiple genes
 CC related to multifactorial diseases, the genome-scale detection of genetic
 CC alterations, the studies in pharmacogenetic reactions, the genotyping
 CC genetic polymorphisms in a large population, the gene expression
 CC profiling in various samples and high throughput genotyping technologies.
 CC This sequence corresponds to an example of a primer of the invention.
 XX
 SQ Sequence 22 BP, 1 A, 12 C, 5 G, 4 T, 0 U, 0 Other;
 Query Match 0.3%; Score 16.2; DB 1; Length 22;
 Best Local Similarity 85.7%; Pred. No. 6.9e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 309 GGCCCTCTGAGCTCTCCCT 329
 DB 1 GGCCCTCTGAGCTCTCCCT 21
 RESULT 521
 AAQ30432/c
 ID AAQ30432 standard; DNA; 23 BP.
 XX
 AC AAQ30432;
 XX
 DT 25-MAR-2003 (revised)
 DT 07-DEC-1992 (first entry)
 XX
 DE Oligomer IL6805 for forming triplex with HUMTIL6 target duplex.
 XX
 KM Human interleukin-6 gene; herpes simplex; AIDS; modified; HIV; RSV; HPV;
 KM malignancy; hepatitis; inflammation; ss.
 XX
 OS Synthetic.
 XX
 FH Key
 FH modified_base
 FT 1 Location/Qualifiers
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= N4 N4 ethanocytosine"
 FT 11..12
 FT misc_feature
 FT /*tag= d
 FT /note= "O-xyloso dimer synthon linkage"
 FT 12..23
 FT misc_feature
 FT /*tag= c
 FT /label= inverted_polarity_region
 FT /note= "see comments"
 FT modified_base
 FT 23
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER= N4 N4 ethanocytosine"
 XX
 PN WO9209705-A1.
 XX
 PD 11-JUN-1992.
 XX
 PF 25-NOV-1991; 91WO-US008811.
 XX
 PR 23-NOV-1990; 90US-00617907.
 PR 18-JAN-1991; 91US-00643382.
 PR 08-APR-1991; 91US-00683420.
 PR 17-APR-1991; 91US-00685444.
 PR 17-APR-1991; 91US-00685446.
 PR 17-APR-1991; 91US-00685447.
 PR 27-SEP-1991; 91US-00766733.
 XX
 PA (GILR-) GILEAD SCI INC.
 XX
 PI Froehner B, Krawczyk S, Matteucci MD, Milligan J;
 XX WPI; 1992-217083/26.
 XX
 PT New oligomers contg. modified bases - which form a triplex with G-C
 PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,

PT herpes malignancy and inflammation.
 XX
 PS Claim 12; Page 71; 77pp; English.
 XX

CC The synthetic oligomer is capable of forming a triplex at physiological
 CC pH with a purine rich target sequence by coupling into the major groove
 CC of the duplex. The specific target sequence of this oligomer is the human
 CC interleukin 6 gene untranslated sequence contg. a purine rich sequence
 CC concd. on one strand of the duplex. The oligomer, and others like it are
 CC useful in diagnosis and therapy of diseases characterised by specific DNA
 CC duplex targets, e.g. HPV, HBV, HIV, hepatitis B, herpes, malignant
 CC tumours and inflammation. The triple helices form under mild conditions
 CC thus assays may be carried out without subjecting the test specimen to
 CC harsh conditions. The oligomer contains an inverted polarity region
 CC formed from an o-xyloso dimer synthon. The linking gp. is o-xyloso
 CC (nucleosides have the 3' positions of xylose sugars linked via the o-
 CC xylene ring). Two nucleosides are coupled through a xylene residue to
 CC form the dimer synthon. This additional modifications may render the
 CC oligomer stable to nuclease activity. The oligomer is able to inhibit
 CC gene expression, as verified by in vitro systems. See also AAQ25452-25501
 CC and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.)
 CC
 XX

SQ Sequence 23 BP; 0 A; 2 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.2; DB 1; Length 23;
 Best Local Similarity 85.7%; Pred. No. 6.9e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAACAAAGAAAA 5413
 Db 22 AAAAAAAAAAAAAAAAAAAAA 2

RESULT 522
 AAX57200/c
 ID AAX57200 standard; DNA; 23 BP.
 XX
 AC AAX57200;
 XX
 DT 26-JUL-1999 (first entry)
 XX
 DE Porcine Oct-4 PCR primer 6-T7 OL.4 5'.

XX
 KW Oct-4; porcine; selectable marker construct; promoter; stem cell;
 KW differential expression; selective isolation; pluripotent; propagation;
 KW cell surface membrane protein; rejection; xenotransplantation;
 KW transgenic pig; organ; transplant; programmed cell death; PCR primer; ss.
 XX
 OS Synthetic.
 OS Sus scrofa.
 OS
 XX
 PN WO9919469-A1.
 XX
 PD 22-APR-1999.
 XX
 PF 09-OCT-1998; 98WO-US021289.
 XX
 PR 09-OCT-1997; 97US-00948113.
 XX
 PA (BIOT-) BIOTRANSPLANT INC.
 XX
 PI Baetacher MW, Akiyoshi DE, Kaplan RA;
 PI WPI; 1999-312473/26.
 DR
 XX
 PT Porcine stem cells comprising a marker gene under an Oct-4 promoter.
 XX
 PS Example 2; Page 28; 69pp; English.
 XX

CC This sequence describes novel methods where a genetic selectable marker
 CC construct operatively linked to a porcine promoter is introduced into a
 CC source of cells that contain porcine stem cells under conditions that
 CC allows for differential expression of the marker and hence the selective

CC isolation and/or propagation of desired porcine stem cells. The methods
 CC are used to isolate and/or enrich and/or selectively propagate
 CC pluripotent porcine cells and to genetically modify porcine cells. The
 CC embryonic stem cells could be altered so as to not express a cell surface
 CC membrane protein that may cause rejection of porcine cells after
 CC xenotransplantation. Transgenic pigs generated through the modified
 CC porcine stem cells are useful for providing organs suitable for
 CC transplants. The methods overcome the problem of prior art methods
 CC associated with the continuing presence of certain differentiated cell
 CC types that can cause elimination of stem cells from the culture by
 CC inducing their differentiation of programmed cell death. The invention
 CC specifically describes the use of the porcine Oct-4 promoter
 CC polynucleotide sequence
 CC
 XX

SQ Sequence 23 BP; 8 A; 8 C; 3 G; 3 T; 0 U; 1 Other;

Query Match 0.3%; Score 16.2; DB 1; Length 23;
 Best Local Similarity 78.3%; Pred. No. 6.9e+02;
 Matches 18; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 3257 AGACCTGGCCTCTGCTTACT 3279
 Db 23 AGTCSTGGTGTCTGCTAAGT 1

RESULT 523
 AAX81611
 ID AAX81611 standard; DNA; 23 BP.
 XX
 AC AAX81611;
 XX
 DT 26-AUG-1999 (first entry)
 XX
 DE PCR primer used to amplify erythrovirus V9 nucleotide sequences.
 XX
 DE Erythrovirus V9; differential diagnosis; parvovirus; infection;
 KW erythrovirus screening; typing; immunoassay; PCR primer; ss.
 XX
 OS Synthetic.
 OS Erythrovirus.
 OS
 XX
 PN FR271751-A1.
 XX
 PD 04-JUN-1999.
 XX
 PF 03-DEC-1997; 97FR-00015197.
 XX
 PR 03-DEC-1997; 97FR-00015197.
 XX
 PA (ASSI-) ASSISTANCE PUBLIQUE HOPITALUX PARIS.
 XX
 PI Nguyen QT, Garbarg CA, Auguste V;
 PI WPI; 1999-349543/30.
 DR
 XX
 PT Erythrovirus V9 and its nucleic acid sequences - can be used in the
 PT diagnosis of its infections.
 XX
 PS Claim 3; Page 27; 80pp; French.
 XX

CC AAX81588-X81630 represent PCR primers used to amplify erythrovirus V9
 CC polynucleotide sequences. Probes and primers derived from erythrovirus V9
 CC polynucleotide sequences (AAX81580) can be used for differential
 CC diagnosis of erythrovirus (parvovirus) infections by a combination of
 CC amplification and hybridisation assay. The probes can also be used to
 CC assess susceptibility to erythrovirus infection and for erythrovirus
 CC screening and typing. The antibodies can be used in immunoassays for
 CC diagnosis of erythrovirus V9 infections
 CC
 XX

SQ Sequence 23 BP; 16 A; 1 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 16.2; DB 1; Length 23;
 Best Local Similarity 85.7%; Pred. No. 6.9e+02;

XX WPI; 2000-647423/62.
DR
XX Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT useful for producing e.g. granulocyte colony stimulating factor protein.
PT interferon alpha and erythropoietin.
XX
PS Claim 18; Page 117; 164pp; English.
XX
CC The present invention relates to enzymatic and antisense nucleic acid
CC molecules that act as inhibitors of the expression of repressor genes
CC encoding the IR2 Orphan receptor, RAR3/COUP-TF-1, the GATA transcription
CC factor gene, IRF-2 and/or the C/EBP Displacement Protein (CDP).
CC Inhibition of the repressors removes prevents inhibition (and
CC consequently increases expression of) genes involved in the production of
CC erythropoietin, granulocyte colony stimulating factor protein and
CC interferon alpha
XX
SQ Sequence 17 BP; 2 A; 1 C; 1 G; 13 T; 0 U; 0 Other;
Query Match 0.3%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 7.1e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 5410 AAAAATGAAAATPAA 5425
DB 16 AAAAATGAAAATPAA 1
RESULT 527
AAF05469/c
XX AAF05469 standard; DNA; 17 BP.
XX
AC AAF05469;
XX
DT 16-FEB-2001 (first entry)
XX
DE Hammerhead ribozyme substrate #2688.
XX
XX Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KM interferon alpha; ss.
XX
XX Homo sapiens.
OS
XX WO200061729-A2.
PN
XX 19-OCT-2000.
PD
XX
PF 11-APR-2000; 2000MO-US009721.
XX
PR 12-APR-1999; 99US-0129390P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Blatt J, Zwick M, Pavco P, Mcswigen J;
PI
XX WPI; 2000-647423/62.
DR
XX
PT Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT useful for producing e.g. granulocyte colony stimulating factor protein,
PT interferon alpha and erythropoietin.
XX
PS Claim 18; Page 117; 164pp; English.
XX
CC The present invention relates to enzymatic and antisense nucleic acid
CC molecules that act as inhibitors of the expression of repressor genes
CC encoding the IR2 Orphan receptor, RAR3/COUP-TF-1, the GATA transcription
CC factor gene, IRF-2 and/or the C/EBP Displacement Protein (CDP).
CC Inhibition of the repressors removes prevents inhibition (and
CC consequently increases expression of) genes involved in the production of
CC erythropoietin, granulocyte colony stimulating factor protein and
CC interferon alpha
XX

SQ Sequence 17 BP; 2 A; 2 C; 0 G; 13 T; 0 U; 0 Other;
Query Match 0.3%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 7.1e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 5411 AAAAATGAAAATPAA 5426
DB 17 AAAAATGAAAATPAA 2
RESULT 528
AAD41868/c
ID AAD41868 standard; RNA; 17 BP.
XX
AC AAD41868;
XX
DT 30-OCT-2002 (first entry)
XX
XX ON-21 oligonucleotide used in the exemplification of the invention.
DE
XX Antisense therapy; infection; cardiovascular disorder; immune reaction;
XX gene therapy; virucide; cytostatic; antibacterial; antiinflammatory;
KM cancer; cardiac; ss.
XX
XX Unidentified.
OS
XX
FH Key
FT modified_base
FT
FT Location/Qualifiers
FT 2.5
FT /tag= a
FT /mod_base= OTHER
FT /note= "5-(1-propynyl)-2'-deoxyuridine; This base is
FT given as N in the sequence shown as SEQ ID NO: 15 in the
FT sequence listing"
FT 6
FT /tag= b
FT /mod_base= OTHER
FT /note= "5-methyl-2'-deoxycytidine; This base is given as
FT N in the sequence shown as SEQ ID NO: 15 in the sequence
FT listing"
FT 7.8
FT /tag= c
FT /mod_base= OTHER
FT /note= "5-(1-propynyl)-2'-deoxyuridine; This base is
FT given as N in the sequence shown as SEQ ID NO: 15 in the
FT sequence listing"
FT 9
FT /tag= d
FT /mod_base= OTHER
FT /note= "5-methyl-2'-deoxycytidine; This base is given as
FT N in the sequence shown as SEQ ID NO: 15 in the sequence
FT listing"
FT 11.16
FT /tag= e
FT /mod_base= OTHER
FT /note= "5-(1-propynyl)-2'-deoxyuridine; This base is
FT given as N in the sequence shown as SEQ ID NO: 15 in the
FT sequence listing"
FT 17
FT /tag= f
FT /mod_base= OTHER
FT /note= "5-methyl-2'-deoxycytidine; This base is given as
FT N in the sequence shown as SEQ ID NO: 15 in the sequence
FT listing"
FT 18.19
FT /tag= g
FT /mod_base= OTHER
FT /note= "5-(1-propynyl)-2'-deoxyuridine; This base is
FT given as N in the sequence shown as SEQ ID NO: 15 in the
FT sequence listing"
FT 20
FT /tag= h
FT /mod_base= OTHER

PT /note="5-methyl-2'-deoxycytidine; This base is given as
 FT N in the sequence shown as SEQ ID NO: 15 in the sequence
 listing"
 XX
 XX US6380368-B1.
 XX
 XX 30-APR-2002.
 XX
 XX 12-FEB-1996; 96US-00599738.
 XX
 XX 26-NOV-1991; 91US-00799824.
 PR 25-AUG-1992; 92US-00935444.
 PR 23-OCT-1992; 92US-00965941.
 PR 25-NOV-1992; 92US-00976103.
 PR 14-NOV-1994; 94US-00338352.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Froehner B, Wagner R, Matencio M, Jones RJ, Gutierrez AJ;
 PI Pudlo J;
 PI
 DR WPI, 2002-535437/57.
 XX
 XX New oligomers useful for binding to DNA duplex target sequence and for
 PT treating e.g. diseases caused by viruses and inflammatory conditions
 PT comprise at least three 3'-5' linked nucleosides.
 XX
 XX Example 6; Col 41-42; 106pp; English.
 XX
 XX The present invention relates to novel oligomers which have enhanced
 CC ability with respect to forming duplexes or triplexes. The oligomers
 CC comprise at least three 3'-5' linked nucleosides or their salts. At least
 CC one internucleoside linkage is not a phosphodiester linkage and at least
 CC one nucleoside comprises a base. Sequences of the invention are useful
 CC for binding to a DNA duplex target sequence via either CT or GT triplex
 CC helix binding motif and in antisense therapies. They are also used for
 CC treating diseases caused by viruses and for diagnostic applications to
 CC detect viral infections, bacterial infections and diseases such as
 CC cancers. The oligomers are also used as primers, in the treatment of
 CC pathological conditions associated with inflammatory conditions,
 CC cardiovascular disorders, immune reactions and bacterial infections and
 CC for modulating target gene expression. They are also useful in gene
 CC therapy. The present sequence is an oligonucleotide used in the
 CC exemplification of the invention
 XX
 XX Sequence 17 BP; 2 A; 3 C; 0 G; 0 T; 12 U; 0 Other;
 SQ
 Query Match 0.3%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 7.1e+02; Indels 0; Gaps 0;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 5407 AAGAAAAAATGAAAT 5422
 DB 16 AAGAAAAAATGAAAT 1
 XX
 XX RESULT 529
 AB210676/c
 ID AB210676 standard; DNA; 18 BP.
 XX
 XX AB210676;
 AC
 XX 16-JAN-2003 (first entry)
 DT
 XX
 XX Haematopoietic cell proliferation disorder related oligonucleotide #816.
 XX
 XX Human; haematopoietic cell proliferation disorder; cytostatic;
 KW gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;
 KW cytosine methylation state; probe; primer; ss.
 XX
 XX Homo sapiens.
 OS Synthetic.
 XX

PN WO200277272-A2.
 XX
 XX 03-OCT-2002.
 XX
 XX 26-MAR-2002; 2002WO-BE003401.
 XX
 XX 26-MAR-2001; 2001US-0278333P.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 XX Berlin K, Braun A, Distler J, Gietig D, Howe A, Mueller J;
 PI Olek A, Piepenbrock C, Adorjan P, Grabs G, Lesche R, Leu E;
 PI Lewin A, Lipscher B, Mater S, Model F, Mueller V, Otto T, Pelat C;
 PI Schwope I, Ziebarth H;
 XX
 XX WPI, 2003-018942/01.
 DR
 XX
 XX Detecting and differentiating between hematopoietic cell proliferative
 PT disorders, comprises contacting a target nucleic acid with a reagent that
 PT distinguishes between methylated and non-methylated CpG dinucleotides.
 XX
 XX Claim 15; Page 57; 117pp; English.
 XX
 XX The present invention describes a method for detecting and
 CC differentiating between haematopoietic cell proliferative disorders
 CC associated with at least 1 gene and/or their regulatory regions in a
 CC subject. The method comprises contacting a target nucleic acid in a
 CC biological sample obtained from the subject with at least 1 reagent,
 CC which distinguishes between methylated and non-methylated CpG
 CC dinucleotides within the target nucleic acid. AB209861 to AB211118
 CC represent specifically claimed nucleotide sequences from the present
 CC invention. Oligonucleotides from the present invention can be used: for
 CC differentiating between healthy haematopoietic cells and proliferative
 CC disorder haematopoietic cells; for differentiating between acute
 CC lymphocytic leukaemia and acute myelogenous leukaemia; as probes for
 CC determining the cytosine methylation state and/or single nucleotide
 CC polymorphisms (SNPs) of haematopoietic cell proliferation disorder
 CC related sequences and their complements; and as primers for the
 CC amplification of haematopoietic cell proliferation disorder related DNA
 CC sequences. The nucleotide sequences from the present invention can also
 CC be used for detecting a predisposition to, differentiation between
 CC subclasses, diagnosis, prognosis, treatment and/or monitoring of
 CC haematopoietic cell proliferative disorders. The present method enables a
 CC highly specific classification of haematopoietic cell proliferative
 CC disorders allowing for improved and informed treatment of patients
 XX
 XX Sequence 18 BP; 5 A; 0 C; 6 G; 7 T; 0 U; 0 Other;
 SQ
 Query Match 0.3%; Score 16; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 7.1e+02; Indels 0; Gaps 0;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 3602 CTAATCTCAAACTCCT 3617
 DB 17 CTAATCTCAAACTCCT 2
 XX
 XX RESULT 530
 ADE65475/c
 ID ADE65475 standard; DNA; 20 BP.
 XX
 XX ADE65475;
 AC
 XX 29-JAN-2004 (first entry)
 DT
 XX
 XX Human WNT3 reverse PCR primer SEQ ID NO:8.
 XX
 XX ss; primer; human; PCR; WNT; chronic rheumatoid arthritis; WNT10B;
 KW rheumatoid arthritis; osteoarthritis.
 XX
 XX Homo sapiens.
 OS
 XX WO2003093508-A1.

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XX 13-NOV-2003.
PD
XX 25-APR-2003; 2003WO-JP005358.
PF
XX 02-MAY-2002; 2002JP-00130883.
PR
XX (NISC-) JAPAN SCI & TECHNOLOGY CORP.
PA
XX Imai K;
PI
XX WPI; 2003-854488/79.
DR
XX Detection of over expression of WNT10B by analysis of synovial fluid,
PT joint tissue or peripheral blood for diagnosis of chronic rheumatoid
PR arthritis.
XX
XX Disclosure; SEQ ID NO 8; 28pp; Japanese.
PS
XX The invention relates to a novel method for diagnosis of chronic
CC rheumatoid arthritis in which synovial fluid, joint tissue or peripheral
CC blood is analysed to detect greater than normal expression of WNT10B. The
CC method is useful for simple diagnosis of rheumatoid arthritis and its
CC discrimination from osteoarthritis. The present sequence represents a PCR
CC primer used in the invention.
XX
SQ Sequence 20 BP; 1 A; 8 C; 1 G; 10 T; 0 U; 0 Other;

Query Match      0.3%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred.No. 7.2e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2124 GAAGCGGAGAGAAAA 2139
DB 17 GAAGCGGAGAGAAAA 2

RESULT 531
AA164176
ID AA164176 standard; DNA; 21 BP.
XX
XX AA164176;
AC
XX 26-FEB-2002 (first entry)
DT
XX NPY Y1 mutant 129SVXBalb/c hybrid mouse analysis PCR primer #3.
DR
XX Anti-inflammatory; neuropeptide Y Y1 receptor; NPY Y1; antagonist;
XX cutaneous; internal inflammation; neurogenic; acute; chronic;
XX drug target; 129SVXBalb/c hybrid mouse; pain transduction; PCR primer;
XX 88.
XX
XX Unidentified.
OS
XX WO200178763-A1.
PN
XX 25-OCT-2001.
PD
XX 12-APR-2001; 2001WO-SE000828.
PF
XX 13-APR-2000; 2000SE-00001373.
PR
XX (KARO-) KAROLINSKA INNOVATIONS AB.
PA
XX Ernfor P, Naveilhan P, De Araujo Lucas G, Hassani H;
XX WPI; 2002-017562/02.
XX
XX Use of selective neuropeptide Y Y1 receptor antagonist for preventing
PT and/or treating inflammatory conditions e.g. neurogenic inflammation and
XX as drug target for screening antiinflammatory compounds.
XX
XX Methods; Page 11; 28pp; English.
PS

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```

XX The present sequence relates to a primer used analyse neuropeptide Y
CC (NPY) Y1 receptor mutant 129SVXBalb/c hybrid mice. These mutants were
CC generated to identify a possible physiological role for NPY in pain
CC transduction and to identify specific receptor subtypes involved. The
CC specification describes a novel use of selective neuropeptide Y Y1
CC receptor antagonist for preparation of a drug for preventing and/or
CC treating inflammatory conditions. The invention has anti-inflammatory
CC activity and provides a selective neuropeptide Y Y1 receptor antagonist.
CC The method is useful for preparation of a drug for preventing and/or
CC treating inflammatory conditions (cutaneous or internal inflammation)
CC which include neurogenic inflammation or acute and chronic/persistent
CC inflammation. The method is further useful as drug target in screening
CC procedures to find anti-inflammatory compounds
XX
SQ Sequence 21 BP; 5 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match      0.3%; Score 16; DB 1; Length 21;
Best Local Similarity 100.0%; Pred.No. 7.3e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1306 AGCCTCTGTTCCACAT 1321
DB 3 AGCCTCTGTTCCACAT 18

RESULT 532
AAH77215
ID AAH77215 standard; DNA; 21 BP.
XX
XX AAH77215;
AC
XX 31-JAN-2002 (first entry)
DT
XX PCR primer 3 for analysis of Y1 mutant 129SVXBalb/c hybrid mice.
DE
XX
XX Mouse; Y1 receptor; PCR primer; Y1 mutant 129SVXBalb/c hybrid; NPY Y1;
XX neuropeptide Y Y1 receptor agonist; anti-nociceptive; pain alleviation;
XX cutaneous pain; visceral pain; chemical pain; thermal pain; diffuse pain;
XX mechanical pain; local pain; chronic pain; persistent pain; dorsal horn;
XX pain neurotransmitter; spinal cord; 88.
XX
XX Unidentified.
OS
XX WO200178762-A1.
PN
XX 25-OCT-2001.
PD
XX 12-APR-2001; 2001WO-SE000827.
PF
XX 13-APR-2000; 2000SE-00001373.
PR
XX (KARO-) KAROLINSKA INNOVATIONS AB.
PA
XX Ernfor P, Naveilhan P, De Araujo Lucas G, Hassani H;
XX WPI; 2002-011073/01.
XX
XX Use of selective neuropeptide Y1 receptor agonist in the preparation of a
PT drug used for treating pain e.g. diffuse or local or chronic/persistent
XX pain.
XX
XX Disclosure; Page 11; 30pp; English.
PS
XX The present polynucleotide sequence represents the PCR primer 3 for use
CC in analysing Y1 mutant 129SVXBalb/c hybrid mice. The mutant hybrid mice
CC were created by the injection of a Y1 targeting construct into
CC homologous recombinant embryonic stem cell clones. The invention relates
CC to the use of, or method of using, a selective neuropeptide Y Y1 (NPY Y1)
CC receptor agonist for preparation of a drug for preventing and/or treating
CC pain conditions. In a further aspect the invention relates to use of the
CC NPY Y1 receptor as a drug target in screening procedures to find agonists
CC of said receptor, more precisely to find anti-nociceptive compounds which

```

CC directly or indirectly affect the NPY Y1 receptor in a selective way for
 CC treatment of the various pain conditions. The NPY Y1 receptor agonist may
 CC be administered to alleviate cutaneous, visceral, chemical, thermal and
 CC mechanical pain conditions, also to alleviate diffuse or local pain
 CC conditions, and to alleviate chronic/persistent pain conditions.
 CC Neuropeptide Y is believed to exert anti-nociceptive actions by
 CC inhibiting the release of substance P and other pain neurotransmitters in
 CC the dorsal horn of the spinal cord
 XX
 SQ Sequence 21 BP, 5 A, 8 C, 3 G, 5 T, 0 U, 0 Other;
 Query Match 0.3%; Score 16; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 7.3e+02;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1306 AGCCTCTGTTCCACAT 1321
 DB 3 AGCCTCTGTTCCACAT 18
 RESULT 533
 AAQ51663/c
 ID AAQ51663 standard; DNA; 19 BP.
 XX
 AC AAQ51663;
 XX
 DT 24-MAY-1994 (first entry)
 XX
 DE ADV primer (III) a.
 XX
 KW ADV; Aujeszky's disease virus; primer; PCR; amplification;
 KM polymerase chain reaction; detection; ss.
 XX
 OS Synthetic.
 XX
 PN JP05276998-A.
 XX
 PD 26-OCT-1993.
 XX
 PF 01-APR-1992; 92JP-00079881.
 XX
 PR 01-APR-1992; 92JP-00079881.
 XX
 PA (NISS) NISSHIN SEIFUN KK.
 XX (ZENK-) ZENKOKU NOGYO KYODO KUMITAI REN.
 XX
 DR WPI; 1993-373607/47.
 XX
 PT Detection of Aujeszky's disease virus - using specified oligo-nucleotide
 PT as primer for selective detection.
 XX
 PS Claim 1; Page 1; 9pp; Japanese.
 XX
 CC The detection method for Aujeszky's disease virus uses a primer pair
 CC selected from the ADV DNA-specific region, with PCR designed to suit the
 CC amplification of DNA, thereby permitting specific and highly sensitive
 CC detection of ADV. Claimed primers are given in AAQ51659-72; additional
 CC primers are given in AAQ51673-74
 XX
 SQ Sequence 19 BP, 2 A, 6 C, 7 G, 4 T, 0 U, 0 Other;
 Query Match 0.3%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3251 GCTGCCAGAGCTGCGCTC 3269
 DB 19 GCAGCCAGAGCATGCGCTC 1
 RESULT 534
 AAT30413
 ID AAT30413 standard; DNA; 19 BP.

XX
 XX AAT30413;
 AC
 XX 28-JAN-1997 (first entry)
 DT
 XX Compound simple sequence repeat primer (GA) 7.5 (TA) 2.
 DE
 XX
 KW Detection; polymorphism; perfect compound simple sequence repeat;
 KW adaptor directed primer; genome; genetic; fingerprinting;
 KW amplified fragment length polymorphism assay; microsatellite region;
 KW genetic trait marking; germplasm comparisons; compound; ss.
 XX
 OS Synthetic.
 XX
 PN WO9617082-A2.
 XX
 PD 06-JUN-1996.
 XX
 PF 21-NOV-1995; 95WO-US015150.
 XX
 PR 28-NOV-1994; 94US-00346456.
 XX
 PA (DUPO) DU PONT DE NEMOURS & CO E I.
 XX
 PI Morgante M, Vogel JM;
 XX
 DR WPI; 1996-277795/28.
 XX
 PT Modified amplified fragment length polymorphism assay - for detection of
 PT polymorphism esp. in microsatellite regions.
 XX
 PS Example 2; Page 84; 173pp; English.
 XX
 CC Detecting polymorphisms between 2 nucleic acid samples, esp. in
 CC microsatellite regions, comprises digesting the nucleic acid to generate
 CC fragments, ligating adaptor segments to their ends, amplifying them using
 CC primer directed amplification and comparing the prods. to detect
 CC differences. The primers used in the amplification comprise a primer
 CC consisting of a perfect cpd. simple sequence repeat (SSR), and an adaptor
 CC directed primer, comprising a sequence complementary to an adaptor
 CC segment. The present sequence is an example of a compound SSR primer. The
 CC method represents a modified amplified fragment length polymorphism
 CC assay, which is partic. useful for genome fingerprinting, i.e. for
 CC genetic trait marking and germplasm comparisons
 XX
 SQ Sequence 19 BP, 9 A, 0 C, 8 G, 2 T, 0 U, 0 Other;
 Query Match 0.3%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1183 GAAAGAGAGAGAGAAAT 1201
 DB 1 GAGAGAGAGAGAGAGATAT 19
 RESULT 535
 ADF31861
 ID ADF31861 standard; RNA; 19 BP.
 AC ADF31861;
 XX
 DT 12-FEB-2004 (first entry)
 XX
 DE Human IGF-1R siRNA lower strand, SEQ ID NO:526.
 XX
 KW RNA interference; short interfering nucleic acid; siRNA;
 KW RNA interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;
 KW drug screening; diagnosis; therapeutic target identification;
 KW pharmacogenomics; gene function analysis; gene mapping; cancer;
 KW proliferative disease; restenosis; polycystic kidney disease;
 KW inflammatory disease; allergic disease; autoimmune disease;

KW transplamt rejection; cytostatic; vasotropic; nephrotoxic;
 KM antiinflammatory; antiallergic; immunosuppressive; human;
 KM insulin-like growth factor 1 receptor; IGF-1R; ss.
 OS Homo sapiens.
 XX
 XX MO2003070911-A2.
 PN
 XX
 XX 28-AUG-2003.
 PD
 XX
 PF 20-FEB-2003; 2003WO-US005044.
 XX
 XX 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 PA
 XX
 PI Mcswiggen J, Beigelman L, Chowrira B;
 DR WPI, 2003-721691/68.
 XX
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of the insulin-like growth
 PT factor-1 receptor gene.
 XX
 XX Example 3; SEQ ID NO 526; 147bp; English.
 PS
 XX
 XX The invention relates to short interfering nucleic acids (siNA) which
 CC downregulate expression of the human insulin-like growth factor 1
 CC receptor (IGF-1R) gene by RNA interference. The siNAs may or may not
 CC comprise ribonucleotides and may be double or single stranded. They
 CC further comprise sense and antisense regions, or alternatively are
 CC assembled from a sense oligonucleotide and an antisense oligonucleotide.
 CC Specifically, the siNAs include short interfering RNA (siRNA), double-
 CC stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs
 CC can be unmodified or chemically modified, can contain
 CC deoxyribonucleotides, and can be chemically synthesised, expressed from a
 CC vector or enzymatically synthesised. The invention also relates to kits
 CC for the in vitro or in vivo delivery of siNA; conjugates and/or complexes
 CC of siNA; and vectors that express siNA. The siNAs are used to modulate
 CC expression of the IGF-1R gene in cells, tissue explants or organisms
 CC (e.g., by ex vivo gene therapy), or in grafts and transplants for the
 CC treatment of a variety of conditions. They may be used for treating
 CC cancer and other proliferative diseases (e.g., restenosis and polycystic
 CC kidney disease), inflammatory and/or allergic diseases, autoimmune
 CC diseases and transplant rejection. The siNAs are also useful for drug
 CC screening, diagnosis, therapeutic target identification and validation,
 CC genetic engineering, pharmacogenomics, studying gene function, and gene
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence
 CC represents the lower strand of a human IGF-1R-targeted double-stranded
 CC siNA.
 XX
 SQ Sequence 19 BP; 9 A; 1 C; 9 G; 0 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Oy 2568 GGAGAGAGATGAGAAC 2586
 |||||
 Db 1 GGAGAGGAAAGGAGAAC 19
 |||||
 RESULT 536
 ADF31584/c
 ID ADF31584 standard; RNA; 19 BP.
 XX
 AC ADF31584;

XX
 DT 12-FEB-2004 (first entry)
 XX
 XX Human IGF-1R transcript target sequence/siNA upper strand, SEQ ID NO:249.
 DB
 XX
 XX RNA interference; short interfering nucleic acid; siNA;
 KM short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
 KM short hairpin RNA; shRNA; expression modulation; gene therapy;
 KM drug screening; diagnosis; therapeutic target identification;
 KM pharmacogenomics; gene function analysis; gene mapping; cancer;
 KM proliferative disease; restenosis; polycystic kidney disease;
 KM inflammatory disease; allergic disease; autoimmune disease;
 KM transplamt rejection; cytostatic; vasotropic; nephrotoxic;
 KM antiinflammatory; antiallergic; immunosuppressive; human;
 KM insulin-like growth factor 1 receptor; IGF-1R; target sequence; ss.
 XX
 OS Homo sapiens.
 XX
 XX MO2003070911-A2.
 PN
 XX
 XX 28-AUG-2003.
 PD
 XX
 PF 20-FEB-2003; 2003WO-US005044.
 XX
 XX 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 PA
 XX
 PI Mcswiggen J, Beigelman L, Chowrira B;
 DR WPI, 2003-721691/68.
 XX
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of the insulin-like growth
 PT factor-1 receptor gene.
 XX
 XX Example 3; SEQ ID NO 249; 147bp; English.
 PS
 XX
 XX The invention relates to short interfering nucleic acids (siNA) which
 CC downregulate expression of the human insulin-like growth factor 1
 CC receptor (IGF-1R) gene by RNA interference. The siNAs may or may not
 CC comprise ribonucleotides and may be double or single stranded. They
 CC further comprise sense and antisense regions, or alternatively are
 CC assembled from a sense oligonucleotide and an antisense oligonucleotide.
 CC Specifically, the siNAs include short interfering RNA (siRNA), double-
 CC stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs
 CC can be unmodified or chemically modified, can contain
 CC deoxyribonucleotides, and can be chemically synthesised, expressed from a
 CC vector or enzymatically synthesised. The invention also relates to kits
 CC for the in vitro or in vivo delivery of siNA; conjugates and/or complexes
 CC of siNA; and vectors that express siNA. The siNAs are used to modulate
 CC expression of the IGF-1R gene in cells, tissue explants or organisms
 CC (e.g., by ex vivo gene therapy), or in grafts and transplants for the
 CC treatment of a variety of conditions. They may be used for treating
 CC cancer and other proliferative diseases (e.g., restenosis and polycystic
 CC kidney disease), inflammatory and/or allergic diseases, autoimmune
 CC diseases and transplant rejection. The siNAs are also useful for drug
 CC screening, diagnosis, therapeutic target identification and validation,
 CC genetic engineering, pharmacogenomics, studying gene function, and gene
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence
 CC represents the upper strand of a human IGF-1R-targeted double-stranded
 CC siNA, which is identical to the IGF-1R transcript target sequence.
 XX
 SQ Sequence 19 BP; 0 A; 9 C; 1 G; 0 T; 9 U; 0 Other;
 Query Match 0.3%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Oy 2568 GGAGAGAGATGAGAAC 2586
 |||||
 Db 1 GGAGAGGAAAGGAGAAC 19
 |||||

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2568 GGAGAGAGAGATGGAGAAC 2586
 |||||
 DB 19 GGAGAGAGAAAGGAGAAC 1

RESULT 537
 AA075581/C
 ID AA075581 standard; DNA; 20 BP.

AC AA075581;

DT 04-AUG-1995 (first entry/)

DE Reverse transcription primer used in cDNA analysis technique.

KM Analysis; gene expression; reverse transcription; primer; cDNA;
 aggregate; restriction enzyme; ss.

OS Synthetic.

PN JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

DR WPI; 1995-018287/03.

PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 by digestion with restriction enzymes.

XX Disclosure; Page 5; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESQ files AA075547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

SO Sequence 20 BP; 2 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5390 ATTAATAAATACAAAAA 5408
 |||||
 DB 20 ATTAATAAATAAATAA 2

RESULT 538
 AAT41429
 ID AAT41429 standard; DNA; 20 BP.

AC AAT41429;

DT 02-FEB-1997 (first entry/)

DE Rat obese gene antisense primer No. 7.

KM Obese gene; ob gene; obesity; polymerase chain reaction; PCR; primer; ss.

OS Synthetic.

XX

PN BP736599-A2.

XX 09-OCT-1996.

XX 03-APR-1996; 96EP-00105353.

XX 03-APR-1995; 95JP-00077966.

XX (TAKE) TAKEDA CHEM IND LTD.

XX Nakao K, Ogawa Y, Fujisawa Y;

PI WPI; 1996-444886/45.

XX New recombinant rat obese gene - used to develop prods. to study obesity
 PT and to diagnose obesity and obesity factors.

XX Example 1; Page 7; 26pp; English.

XX Primers 5-8 (AAT41427-30) are based on a 184 bp rat obese gene cDNA clone
 CC isolated from epididymis fat tissue (see also AAT41426). Primers 5 and 7,
 CC and primers 6 and 8, were used in 2 PCR reactions to amplify cDNA derived
 CC from epididymis fat tissues of Sprague-Dawley rats. Amplified products
 CC were cloned into Bluescript, introduced into E. coli JM109 and
 CC sequenced. A complete rat obese gene cDNA (AAT41421) was obtd

SO Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 22 TGAAGAACTGGAGCCA 40
 |||||
 DB 1 TGAAGATACCTGGAGCCA 19

RESULT 539
 AA55551/C
 ID AA55551 standard; DNA; 20 BP.

AC AA55551;

DT 30-AUG-2000 (first entry/)

DE TRAF2 antisense oligonucleotide ISIS# 16842.

XX Tumour necrosis factor receptor-associated factor; TRAF; human;
 KM antisense oligonucleotide; phosphorothioate; antiproliferative;
 XX anti-inflammatory; E-selectin; jun kinase; ss.

OS Synthetic.

PN WO200020435-A1.

PD 13-APR-2000.

XX 05-OCT-1999; 99WO-US023171.

XX 06-OCT-1998; 98US-00167109.

XX (ISIS-) ISIS PHARM INC.

XX Baker BF, Cowseert LM, Monia BP, Xu XS;

PI WPI; 2000-303732/26.

XX Antisense oligonucleotides targeted to nucleic acids encoding human tumor
 PT necrosis factor receptor-associated factor (TRAF), useful for treating
 PT diseases associated with TRAF expression such as inflammatory diseases.

XX Example 16; Page 52; 170pp; English.

XX

CC The present invention relates to antisense oligonucleotides (see AA55496
 CC -A55757) which are targeted to nucleic acids encoding a human tumour
 CC necrosis factor receptor-associated factor (TRAF). The antisense
 CC sequences comprise at least one modified internucleotide linkage, which
 CC is a phosphorothioate linkage. The oligonucleotides also include at least
 CC one modified sugar moiety such as a 2'-O-methoxyethyl sugar moiety.
 CC Sequences AA55490-A55495 represent nucleotide sequences encoding human
 CC TRAF1-6. Included in the invention is a method for treating a human
 CC having a disease associated with the expression of TRAF comprising
 CC administering an antisense oligonucleotide. The reduction of jun kinase
 CC activation in cells comprises contacting the cells with an antisense
 CC oligonucleotide targeted to TRAF-6. A method for the reduction of B-
 CC selectin expression in cells or tissues comprises contacting the cells or
 CC tissues with an antisense oligonucleotide targeted to TRAF-2 or TRAF-6.
 CC The antisense oligonucleotides have antiproliferative and anti-
 CC inflammatory activity and are useful for treating disorders associated
 CC with cell proliferation and inflammation. The antisense oligonucleotides
 CC may also be used as a diagnostic probe for studying gene function

XX Sequence 20 BP; 0 A; 8 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 20;

Best Local Similarity 89.5%; Pred. No. 7.7e+02; Mismatches 2; Indels 0; Gaps 0;

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1811 GGAGCCAGCCACAGCCGCC 1829
 DB 19 GCAGCCAGCCACAGCCGCC 1

RESULT 540

AA55806
 ID AA55806 standard; DNA; 20 BP.

AC AA55806;

DT 01-SEP-2000 (first entry)

XX Human histone deacetylase HD2 antisense oligonucleotide SEQ ID NO:51.

KW Human; DNA methyltransferase; DNA Metase; antisense oligonucleotide;
 KW modulation; inhibition; gene expression; combination therapy; ptc;
 KW histone deacetylase; HDAC; thymidylate synthase; tumour suppressor;
 KW methylation; gene therapy; tumour; cytostatic; antiasthmatic;
 KW antiinflammatory; inflammation; asthma; ss.

XX Homo sapiens.

XX WO200023112-A1.

XX 27-APR-2000.

XX 19-OCT-1999; 99WO-US024278.

XX 19-OCT-1998; 98US-0104804P.

XX (METH-) METHYLGENS INC.

XX Besterman JM, Macleod AR, Siders WM;

XX WPI; 2000-339532/29.

XX Inhibiting gene expression e.g. DNA methyltransferase, by treating cells
 PT with a synergistic amount of antisense oligonucleotide and protein
 PT effectors e.g. 5-aza-cytidine of gene products, useful for gene therapy
 PT of e.g. tumors.

XX Disclosure; Page 29; 99pp; English.

XX The present invention describes a method for inhibiting the expression of
 CC a gene in a cell comprising contacting the cell with an effective
 CC synergistic amount of an antisense oligonucleotide which inhibits
 CC expression of the gene, and an effective synergistic amount of a protein

CC effector of a product of the gene. Also described are: (1) a method for
 CC treating a disease responsive to inhibition of a gene in a mammal; (2) a
 CC method for inhibiting tumour growth in mammal; (3) an inhibitor of a gene
 CC comprising an antisense oligonucleotide which inhibits expression of the
 CC gene in operable association with a protein effector of a gene product;
 CC and (4) a pharmaceutical composition comprising the inhibitor of (3). The
 CC studies and as therapeutic tools, e.g. as gene therapy tools for human
 CC diseases including benign and malignant tumours, inflammation or asthma.
 CC The methods, inhibitors and compositions of the invention that inhibit
 CC expression or activity of a gene or gene product may be used to treat
 CC patients having, or predisposed to developing, a disease responsive to
 CC inhibition of the gene. These may also be used to activate silenced genes
 CC to provide missing gene functions and improve a given condition.
 CC Furthermore, the methods and compositions are useful as probes of the
 CC physiological function of a gene product in an experimental cell culture
 CC or animal system; and to evaluate the effect of inhibiting gene activity
 CC or expression. AA55758 to AA55842 represent oligonucleotide sequences
 CC which are used in the exemplification of the present invention

XX Sequence 20 BP; 0 A; 7 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 20;

Best Local Similarity 89.5%; Pred. No. 7.7e+02; Mismatches 2; Indels 0; Gaps 0;

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2642 TGCAGCTGCTGCTGCAGCC 2660
 DB 1 TGCTGCTGCTGCTGCTGCC 19

RESULT 541

AA232975
 ID AA232975 standard; DNA; 20 BP.

AC AA232975;

DT 09-FEB-2000 (first entry)

XX Human MKK4 exon A PCR primer CG2exA.RP.

KW MKK4; mitogen activated protein kinase; MAPK; MAPK pathway; mutation;
 KW somatic; signal transduction; apoptosis; stress; cytokine; induction;
 KW phosphorylation; Jun kinase; JNK; p38; tumour; suppressor;
 KW loss of heterozygosity; LOH; cancer; detection; diagnosis; prognosis;
 KW breast cancer; pancreatic cancer; colorectal cancer; testicular cancer;
 KW drug screening; gene therapy; protein replacement therapy; mimetic; PCR;
 KW primer; ss.

XX Synthetic.

XX Homo sapiens.

XX US5989885-A.

XX 23-NOV-1999.

XX 13-JUN-1997; 97US-00874186.

XX 10-JAN-1997; 97US-00782482.

XX (MYRI-) MYRIAD GENETICS INC.

XX Skolnick MH, Perry WL, Tavtigian SV, Teng DH-;

XX WPI; 2000-022786/02.

XX Polynucleotides comprising all or a portion of the tumor suppressor gene
 PT MKK4 locus are useful for diagnosis, prognosis and therapy of human
 PT cancers.

XX Claim 8; Col 33-34; 63pp; English.

XX Primers AA232974-232977 were used to amplify exon A of the gene encoding

CC a human wild-type protein kinase, MKK4. The PCR product was then screened
CC for sequence variations. MKK4 (also known as JNK1 and SEK1) may be
CC involved in a MAPK (mitogen-activated protein kinase) pathway for the
CC signal transduction of cytokine-induced and stress-induced apoptosis.
CC MKK4 is also involved in suppressing a variety of tumours. MKK4 is a dual
CC specific kinase that activates Jun kinases (JNKs) and p38 (a MAPK) but
CC not extracellular signal-regulated kinases (ERKs) which are a subgroup of
CC MAPKs. The JNK and p38 MAPKs are activated via dual phosphorylation on
CC threonine and tyrosine and then go on to activate proteins further
CC downstream in signal transduction pathways. Tumour suppressor genes such
CC as MKK4 are deleted at high frequency in certain tumour types. The
CC deletions often involve loss of a single allele, which is known as loss
CC of heterozygosity (LOH), and the remaining allele is presumed to be non-
CC functional, either because of a pre-existing inherited mutation, or
CC because of a secondary sporadic mutation. Alternatively, the deletion may
CC involve homozygous deletion of both alleles. LOH events commonly involve
CC deletions spanning many megabases of DNA, while homozygous deletions are
CC relatively small in size, probably due to the proximity of essential
CC genes. Sequences derived from the MKK4 gene can be used to detect a
CC portion of the MKK4 locus or its expression product in a tissue sample
CC for the diagnosis and prognosis of human cancer, and can also be used to
CC diagnose or a predisposition to breast, pancreatic, colorectal and
CC testicular cancers, as specific MKK4 mutations have been found in cell
CC lines derived from such tumours. MKK4 oligonucleotides are useful for the
CC detection of the nucleotide sequence of a particular MKK4 allele via PCR,
CC and can be used as probes to detect point mutations. PCR amplification can
CC products and mismatches between the MKK4 gene or mRNA. MKK4 proteins can
CC be used for screening of drugs which can restore MKK4 gene product.
CC function for cancer therapy. MKK4 gene therapy, protein replacement
CC therapy and protein mimetics that reconstitute the function of the MKK4
CC protein may be used for therapy of human cancers which result from a
CC mutation in the MKK4 gene
SQ Sequence 20 BP; 6 A; 1 C; 13 G; 0 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2566 GGGGAGAGAGAGATGGAGA 2584
DB 2 GGGGAGAGAGAGAGAGAGA 20

RESULT 542
AAC79540
ID AAC79540 standard; DNA; 20 BP.

AC AAC79540;

XX 07-FEB-2001 (first entry)

DE Murine p38beta antisense oligonucleotide SEQ ID 65.

XX Antisense oligonucleotide; p38 mitogen activated protein kinase; MAPK;
KM antineoplastic; antiarthritic; immunosuppressive; cardiant; heart disease;
KW antiinflammatory; autoimmune disease; rheumatoid arthritis; apoptosis;
KW phosphorothioate; ss.

OS Mus sp.

XX MO200059919-A1.

PD 12-OCT-2000.

XX 04-APR-2000; 2000MO-US008794.

XX 06-APR-1999; 99US-00286904.

XX (ISIS-) ISIS PHARM INC.

XX Montia BP, Gaarde WA, Nero PS, McKay R, Popoff I;

DR WPI; 2000-664982/64.
XX Antisense compound targeted to p38 mitogen activated protein kinase
PT inhibits protein kinase and is useful for diagnosing and treating
PT inflammatory, autoimmune and heart disease.
XX Example 5; Page 53; 90pp; English.

CC This invention relates to antisense compounds 8-30 nucleobases in length
CC targeted to the 5'-untranslated region, translational start site,
CC translational termination region or 3'-untranslated region of a nucleic
CC acid encoding a p38 mitogen activated protein kinase (MAPK), where the
CC antisense oligonucleotides inhibit the expression of MAPK. Sequences
CC AAC79480 and AAC79501 represent human p38alpha MAPK and p38beta MAPK cDNA
CC sequences. AAC79481 - AAC79500 and AAC79553 - AAC79570 represent human
CC p38alpha antisense oligonucleotides, while AAC79502 - AAC79521 and
CC AAC79571 - AAC79580 represent human p38beta antisense oligonucleotides.
CC Also included in the invention are a p38alpha cDNA sequence AAC79523 and
CC antisense oligonucleotides AAC79523 - AAC79536 isolated from rat tissue.
CC Murine p38beta MAPK cDNA is represented in AAC79537 and antisense
CC oligonucleotides targeting the sequence are given in AAC79538 - AAC79552.
CC The antisense oligonucleotides have antineoplastic, antiarthritic,
CC immunosuppressive, cardiant and antiinflammatory activity. The antisense
CC oligonucleotides are useful for inhibiting the expression of p38 MAPK in
CC cells or tissues. The oligonucleotides are used for treating an animal
CC with diseases such as inflammatory or autoimmune diseases e.g. rheumatoid
CC arthritis, or heart disease. The oligonucleotides are also useful for
CC inhibiting inflammation or apoptosis
SQ Sequence 20 BP; 2 A; 10 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2639 CCCTGCAGCTGCTGTGCA 2657
DB 1 CCCTGCAGCGCTGCGGCA 19

RESULT 543
AAH43116
ID AAH43116 standard; DNA; 20 BP.

AC AAH43116;

XX 19-SEP-2001 (first entry)

DE Antisense oligo, target HDAC-2 121-141.

XX Antisense; histone deacetylase; HDAC-1; HDAC-2; HDAC-4; inhibitor;
KW cell proliferation; cancer; restenosis; psoriasis; protozoal infection;
KW fungal infections; ss.

OS Synthetic.

XX WO200138322-A1.

PD 31-MAY-2001.

XX 22-NOV-2000; 2000MO-IB001881.

XX 23-NOV-1999; 99US-0167035P.

XX (METH-) METHYLGENE INC.

XX Delorme D, Ruel R, Lavoie R, Thibault C, Abou-Khalil E;

XX WPI; 2001-432601/46.

XX New inhibitors of histone deacetylase e.g. N-hydroxy-5-(4-
PT (benzenesulfonylamino)-phenyl)-4-yn-2-pentanamide for treating cancer,
PT restenosis or fungal infections.

PS Disclosure; Page 40; 147bp; English.

CC The sequences given in AHA4115-21 are oligonucleotides which are
CC antisense to the histone deacetylase gene, HDAC-2. These oligonucleotides
CC may be used in combination with an inhibitor of histone deacetylase
CC enzyme function, to give an improved inhibitory effect, thereby reducing
CC the amount of inhibitor required to obtain a given inhibitory effect.
CC Compounds containing these oligonucleotides may be used to treat cell
CC proliferation conditions such as cancer, metastasis or psoriasis. They
CC can also be used to treat protozoal and fungal infections

XX Sequence 20 BP; 0 A; 7 C; 7 G; 6 T; 0 U; 0 Other;

SQ

Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0

DG 2642 TGCAGCTGCTGCTGCAGCC 2660
|||
1 TGCTGCTGCTGCTGCTGCC 19

RESULT 544
AAC81378
AAC81378 standard; DNA; 20 BP.

AAC81378;
23-FEB-2001 (first entry)

Human Y-box binding protein 1 antisense oligonucleotide, SEQ ID NO:62.

XX Human Y-box binding protein 1; YB-1; DNA binding protein B; dbpB;
XX transcription factor; nucleic acid binding; DNA repair;
XX cell sensitisation; genotoxic stress; immune regulation; MHC expression;
XX viral gene expression; extracellular matrix degradation regulator;
XX redox signalling; expression inhibition; tumour formation;
XX cancer multistage resistance; inflammation; immune disorder; infection;
XX phosphothioate; antisense oligonucleotide; ss.

OS Homo sapiens.
XX
XX US6140126-A.
XX
XX 31-OCT-2000.
XX
XX 26-OCT-1999; 99US-00429323.
XX
XX 26-OCT-1999; 99US-00429323.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Cowsett LM;
XX
XX WPI; 2001-023284/03.
XX
XX Antisense oligonucleotides, useful for modulating the expression of Y-box
XX binding protein 1, as well as for treating or preventing diseases
XX associated with Y-box binding protein 1 expression, e.g. inflammation or
XX tumor formation.

PS Claim 3; Col 43-44; 40pp; English.

CC Sequences AAC81326-C81405 represent antisense oligonucleotides targeted
CC to the human Y-box binding protein 1 gene, which inhibit its expression.
CC The antisense oligonucleotides were designed to target different regions
CC of the human Y-box binding protein 1 mRNA, and were analysed for their
CC effect on Y-box binding protein 1 mRNA levels by quantitative real-time
CC PCR. Human Y-box binding protein 1 (also known as YB-1, DNA binding
CC protein B and dbpB) is a member of the Y-box binding protein family of
CC transcription factors, a highly conserved family of nucleic acid binding
CC proteins which bind to the Y-box, an inverted CCAAT sequence found in the

[illegible]

Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 QY 2642 TGCAGCTGCTGCTGCAGCC 2660
 :|||||
 DB 1 UGCUGCTGCTGCTGCC 19

RESULT 546

AAC89536
 ID AAC89536 standard; DNA; 20 BP.

AC AAC89536;

DT 08-MAR-2001 (first entry)

DE Human HDAC-2 PCR primer SEQ ID NO: 6.

KW Histone deacetylase; HDAC-1; HDAC-2; HDAC-3; HDAC-4; HDAC-5; HDAC-C;
 KM HDAC-D; cell cycle; tumorigenesis; cancer; inhibitor; antisense;
 KW gene therapy; PCR primer; ss.

OS Homo sapiens.

PN W0200071703-A2.

PD 30-NOV-2000.

PF 03-MAY-2000; 2000MO-1B001252.

PR 03-MAY-1999; 99US-0132287P.

XX (METH-) METHYLGENE INC.

PI Macleod AR, Li Z, Besterman JM;

DR WPI; 2001-016407/02.

PT Antisense oligonucleotide that inhibits expression of a histone
 deacetylase, useful for treating and/or alleviating the symptoms of
 neoplasia, or for inhibiting neoplastic cell growth in an animal.

PS Disclosure; Page 12; 125pp; English.

CC The present invention provides inhibitors of histone deacetylase enzymes
 such as HDAC-1, HDAC-2, HDAC-3, HDAC-4, HDAC-5, HDAC-C and HDAC-D. These
 inhibitors may be antisense strands or they may be compounds identified
 by contacting the enzyme with the compound and measuring the resulting
 enzyme activity. These inhibitors are useful for treating cancers and for
 identifying which histone deacetylase is involved in a neoplasia

SO Sequence 20 BP; 0 A; 7 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.34; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.54; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2642 TGCAGCTGCTGCTGCAGCC 2660
 :|||||
 DB 1 TGCTGCTGCTGCTGCC 19

RESULT 547

AAS05714
 ID AAS05714 standard; DNA; 20 BP.

AC AAS05714;

DT 09-SEP-2004 (revised)

DT 07-SEP-2001 (first entry)

DE Aminopurine substituted region of an RP-TFO.

KW reverse phase triplex forming oligonucleotide; RP-TFO;

KW protected nucleic acid sequence; PNAs; single nucleotide polymorphism;
 KM SNP; short tandem repeat; cancer; Factor V Leiden SNP; ss.

OS Synthetic.

PH Key
 FT modified_base
 FT 1 Location/Qualifiers

FT /tag= a
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT 3
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT 5
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT 7
 FT /tag= d
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT 9
 FT /tag= e
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT 11
 FT /tag= f
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT 13
 FT /tag= g
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT 15
 FT /tag= h
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT 16
 FT /tag= i
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT 17
 FT /tag= j
 FT /mod_base= OTHER
 FT /note= "Other= Hypoxanthine or Inosine"

FT 18
 FT /tag= k
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT 20
 FT /tag= 1
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT modified_base
 FT 20
 FT /tag= 1
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT modified_base
 FT 17
 FT /tag= j
 FT /mod_base= OTHER
 FT /note= "Other= Hypoxanthine or Inosine"

FT modified_base
 FT 18
 FT /tag= k
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT modified_base
 FT 20
 FT /tag= 1
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT modified_base
 FT 20
 FT /tag= 1
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT modified_base
 FT 20
 FT /tag= 1
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT modified_base
 FT 20
 FT /tag= 1
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT modified_base
 FT 20
 FT /tag= 1
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT modified_base
 FT 20
 FT /tag= 1
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT modified_base
 FT 20
 FT /tag= 1
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT modified_base
 FT 20
 FT /tag= 1
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT modified_base
 FT 20
 FT /tag= 1
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT modified_base
 FT 20
 FT /tag= 1
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT modified_base
 FT 20
 FT /tag= 1
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT modified_base
 FT 20
 FT /tag= 1
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT modified_base
 FT 20
 FT /tag= 1
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT modified_base
 FT 20
 FT /tag= 1
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT modified_base
 FT 20
 FT /tag= 1
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT modified_base
 FT 20
 FT /tag= 1
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT modified_base
 FT 20
 FT /tag= 1
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

FT modified_base
 FT 20
 FT /tag= 1
 FT /mod_base= OTHER
 FT /note= "A is aminopurine substituted"

PT Analyzing target nucleic acid sequences, useful for population genetics,
PT drug development and diagnosing cancer, comprises hybridizing triplex
PT forming oligonucleotide and probe to target sequence.
XX
XX Example 2; Page 66; 141pp; English.
XX
CC The sequence is a second reverse phase triplex forming oligonucleotide,
CC RP-PFO (3' to the SNP) used to analyse Factor V Leiden SNP using the
CC method of the invention. The invention relates to analysing target
CC nucleic acid sequences comprising restricting isolated DNA, hybridising
CC at least one triplex forming oligonucleotide (TRO), adding a 3' to 5'
CC exonuclease to form a protected nucleic acid sequence (PNAS) tail
CC structure, hybridising the captured structure with a single nucleotide
CC polymorphisms (SNP) identification probe and determining the SNP score.
CC The methods can be used for analysing target nucleic acid sequences,
CC especially genomic DNA sequences, to determine if they contain SNPs or
CC short tandem repeats (STRs). The methods can be used to detect SNPs for
CC use in population genetics, drug development, forensics, cancer, genetic
CC disease research, genomic analysis, diagnostics and therapeutics in
CC humans, plants and animals
CC
CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
XX
SQ Sequence 20 BP, 19 A, 0 C, 0 G, 0 T, 0 U, 1 Other;
XX
Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAATCAAAAAAAAAAGAAA 5412
DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
XX
RESULT 548
ABK30536
ID ABK30536 standard; DNA; 20 BP.
XX
AC ABK30536;
XX
DT 23-APR-2002 (first entry)
XX
DE Human glioma-associated oncogene-1 antisense oligonucleotide ISIS 124868.
XX
XX Human; glioma-associated oncogene-1 associated disease; infection;
XX inflammation; tumour formation; cytostatic; antiinflammatory; antisense;
XX phosphorothioate; ss.
XX
OS Homo sapiens.
XX
PN US6329203-B1.
XX
PD 11-DEC-2001.
XX
PF 08-SEP-2000; 2000US-00657042.
XX
PR 08-SEP-2000; 2000US-00657042.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Wyatt J;
XX
DR WPI; 2002-138363/18.
XX
PT Novel antisense compounds targeted to nucleic acids encoding glioma-
PT associated oncogene-1, for modulating the gene expression and treating
PT diseases associated with expression of the oncogene in humans.
XX
PS Claim 1; Col 45-46; 43pp; English.
XX
CC The present invention relates to antisense compounds and methods for
CC modulating the expression of human glioma-associated oncogene-1. The
CC antisense compounds, particularly antisense oligonucleotides, target and

CC inhibit the expression of human glioma-associated oncogene-1. The
CC antisense compounds are useful for inhibiting the expression of human
CC glioma-associated oncogene-1 in human cells or tissues and for treating
CC an animal, particularly a human suspected of having or being prone to a
CC disease or condition associated with expression of glioma-associated
CC oncogene-1. The compounds are useful for diagnostics, therapeutics and as
CC research reagent, e.g. prophylactically to prevent or delay infection,
CC inflammation or tumour formation. The antisense compounds are safely and
CC effectively administered to humans. ABK30509-ABK30586 represent the
CC antisense oligonucleotides of the invention which comprise a
CC phosphorothioate backbone
XX
SQ Sequence 20 BP, 1 A, 6 C, 9 G, 4 T, 0 U, 0 Other;
XX
Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2641 CTGCAGCTGCTGCTGCAGC 2659
DB 2 CTGCAGCTGCTGCTGCAGC 20
XX
RESULT 549
ABQ96037
ID ABQ96037 standard; DNA; 20 BP.
XX
AC ABQ96037;
XX
DT 28-OCT-2002 (first entry)
XX
DE Tumour suppression-related oligonucleotide #1688.
XX
XX Tumour; cytostatic; antiviral; neuroprotective; nootropic; neuroleptic;
XX tumour suppression; tumour reversion; apoptosis; viral resistance; human;
XX viral infection; cell degeneration disease; neurodegeneration; d; d;
XX Alzheimer's disease; schizophrenia; immune disease; inflammatory disease.
XX
OS Homo sapiens.
XX
PN FR2819824-A1.
XX
PD 26-UTL-2002.
XX
PF 23-JAN-2001; 2001FR-00000899.
XX
PR 23-JAN-2001; 2001FR-00000899.
XX
PA (MOLE-) MOLECULAR ENGINES LAB SA.
XX
PI Telerman A, Amson R, Tuijnder M, Susini L;
XX
DR WPI; 2002-610803/66.
XX
PT New nucleic acid implicated e.g. in tumor suppression, useful for
PT diagnosis of tumors, viral infection and cellular degeneration and for
PT drug screening.
XX
PS Claim 1; Page 468; 623pp; French.
XX
CC The present invention relates to novel human nucleic acid sequences (I).
CC The present sequence is one such nucleic acid sequence. Expression of (I)
CC are implicated in tumour suppression or reversion and apoptosis and viral
CC resistance. (I) are useful as probes or primers for detecting,
CC identifying, measuring and/or amplifying nucleic acid sequences, as
CC antisense reagents and for recombinant production of polypeptides. (I),
CC polypeptides (II) encoded by (I), vector containing (I), cells containing
CC these vectors and antibodies (Ab) against (II) are all useful for
CC treatment/prevention of viral, tumour and cell degeneration diseases
CC (especially neurodegeneration, such as Alzheimer's disease and
CC schizophrenia). Analysing the expression of (I) is also useful for
CC diagnosis and/or prognosis of such diseases. Transgenic animals carrying
CC (I) are used for studying the aetiology of these diseases (also immune

CC and inflammatory diseases). Note: In the present specification, SEQ ID 1
CC to 2280 are claimed in Claim 1, however only SEQ ID 1 to 2270 are shown
in the specification

XX Sequence 20 BP, 17 A, 1 C, 1 G, 0 T, 0 U, 1 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 5396 AAAAAACAAAAAGAAAAA 5415

DB 1 AAAAAACAAAAAGAAAAA 20

RESULT 550
ID ABL45546 standard; DNA; 20 BP.

XX ABL45546;

DT 11-APR-2002 (first entry)

XX Human chromosome 21q22.1 PCR primer SEQ ID NO:2590.

XX Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
XX PCR primer; ss.

XX Homo sapiens.

XX JP2001321190-A.

XX 20-NOV-2001.

XX 12-MAR-2001; 2001JP-00068285.

XX 10-MAR-2000; 2000JP-00066716.

XX (RIKA) RIKAGAKU KENKUSHO.

XX (GENO-) GENOTEX YG.

XX WPI; 2002-144136/19.

XX Arraying genome clones.

XX Claim 6, Page 56; 528pp; Japanese.

XX The present invention describes a method of arraying genome clones. The
XX method comprises: (a) clones of the genomic libraries contained in
XX multowell plates numbered for discrimination are mixed in each of the
XX multowell plates; (b) a primer designed based on the chromosome marker
XX sequence is added to the mixture to carry out an amplification reaction;
XX (c) a signal corresponding to the marker is detected from the resultant
XX amplified product to specify the discrimination Nos. of the multowell
XX plates containing the clones having said marker sequence; (d) the order
XX of the markers is changed so that the same discrimination Nos. succeed to
XX the maximum in the specified discrimination Nos. to array the multowell
XX plates; (e) the clones in the multowell plates of the specified
XX discrimination Nos. are mixed respectively in each well of longitudinal
XX and lateral directions; (f) the mixed clones are cultured and the
XX resultant cultures are amplified by using the above primer; (g) signals
XX are detected from the amplified products; (h) the clones in the multowell
XX plates are specified from the detected results; and (i) the clones are
XX reconstituted as the positions on the chromosome and arrayed. The
XX microarray is useful for gene analysis. ABL42957 to ABL45122 represent
XX PCR primers for human chromosome 1p36-35 DNA, and ABL45123 to ABL45634
XX represent PCR primers for human chromosome 21q22.1, which are
XX specifically claimed for use in the present invention

XX Sequence 20 BP, 4 A, 6 C, 4 G, 6 T, 0 U, 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 2389 CACCTGTGTCAGAGT 2407

DB 1 CACCTGTGTCAGAGT 19

RESULT 551
ID AAD37201/C standard; DNA; 20 BP.

XX AAD37201;

DT 21-AUG-2002 (first entry)

XX Human MEK4 antisense oligonucleotide, ISIS #123136.

XX Human; MEK4 modulation; mitogen-activated protein kinase kinase 4; MTX1;

XX MAP3K4; MAP three kinase 1; MAP/ERK kinase kinase 4; MAPKKK4; cytosolic;

XX prophylaxis; immunological; hyperproliferative disorder; cancer; therapy;

XX antisense; inflammatory; phosphorothioate backbone; ss.

XX Homo sapiens.

XX Synthetic.

XX Key

XX modified_base

XX 1.20

XX /tag= a

XX /mod_base= OTHER

XX /note= "Phosphorothioate backbone"

XX 1.5

XX /tag= b

XX /mod_base= OTHER

XX /note= "2'-methoxyethyl nucleotides"

XX 2

XX /tag= d

XX /mod_base= m5c

XX 5

XX /tag= e

XX /mod_base= m5c

XX 8

XX /tag= f

XX /mod_base= m5c

XX 11

XX /tag= g

XX /mod_base= m5c

XX 14

XX /tag= h

XX /mod_base= m5c

XX 16

XX /tag= c

XX /mod_base= OTHER

XX /note= "2'-methoxyethyl nucleotides"

XX 17

XX /tag= i

XX /mod_base= m5c

XX 20

XX /tag= j

XX /mod_base= m5c

XX WO200227033-A1.

XX 04-APR-2002.

XX 28-SEP-2001; 2001WO-US030549.

XX 29-SEP-2000; 2000US-00676436.

XX (ISIS-) ISIS PHARM INC.

XX Ward DT, Gaarde WA, Monia BP, Wyatt JR,

XX WPI; 2002-416486/44.

XX New antisense compound targeted to nucleic acid encoding mitogen-
PT activated protein kinase 4, useful for treating immunologic disorder,
PT inflammatory disorder or cancer.
XX
PS Claim 3, Page 93, 132pp; English.
XX
XX The present invention relates to antisense compounds, compositions and
CC methods for modulating the expression of MEK4 (also referred to as mitogen-
CC activated protein kinase 4; MAP3K4; MAP three kinase 1; MAP3RK
CC kinase kinase 4; MAPKKK4; MKK1). The antisense oligos are useful for
CC inhibiting the expression of MEK4 in cells or tissues. They are also
CC useful for treating an animal having a disease or condition associated
CC with MEK4 such as immunological, inflammatory, hyperproliferative
CC disorder or cancer. Sequences of the invention are also useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC They are also useful in antisense therapy. The present sequence is an
CC antisense oligonucleotide targeted to human MEK4 DNA. This sequence is
CC used in the exemplification of the invention
XX
SQ Sequence 20 BP; 6 A; 7 C; 7 G; 0 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 2641 CTGCAGCTGCTGCTGCAGC 2659
DB 19 CTGCTGCTGCTGCTGCTGC 1
RESULT 552
ABX04655
ID ABX04655 standard; DNA; 20 BP.
XX
XX ABX04655;
XX
XX 14-JAN-2003 (first entry)
XX
XX Human endogenous retrovirus k (herv-k) associated probe #27.
XX
XX Human; endogenous retrovirus; herv; prostate cancer; testicular cancer;
XX multiple sclerosis; insulin-dependent diabetes mellitus; HML-2 protease;
XX cancer; transgenic animal; probe; ss.
XX
XX Human endogenous retrovirus.
XX
XX WO200246477-A2.
XX
XX 13-JUN-2002.
XX
XX 07-DEC-2001; 2001WO-US047824.
XX
XX 07-DEC-2000; 2000US-0251830P.
XX
XX 07-DEC-2001; 2001US-00016604.
XX
XX (CHIR) CHIRON CORP.
XX
XX Garcia P, Hardy SF, Williams LT, Escobedo J;
XX WPI, 2002-691475/74.
XX
XX Novel isolated polypeptides useful for diagnosis of prostate cancer.
XX
XX Claim 18; Page 146; 152pp; English.
XX
XX The invention describes novel isolated polypeptides (I, II) useful for
CC diagnosing prostate cancer comprising obtaining a patient sample
CC containing prostate cells and detecting the presence or absence of an
CC expression product of a HML-2 endogenous retrovirus in a patient sample.
CC Polynucleotides associated with (I) are useful for diagnosis or treatment
CC of testicular cancer, multiple sclerosis or insulin-dependent diabetes
CC mellitus. An inhibitor of a HML-2 protease and a transdominant negative

CC mutant of HML-2 CORP are also useful in the manufacture of a medicament
CC for treating prostate cancer. (I) and (II) are useful for generating
CC antibodies specific to the polypeptides associated with cancer, as
CC targets for therapeutic intervention, and in immunising a transgenic
CC animal. This sequence represents a probe used for detecting the presence
CC of human endogenous retrovirus (herv) of the HML-2 sub-group in prostate
CC tissue
XX
SQ Sequence 20 BP; 16 A; 1 C; 2 G; 1 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 5393 AAAAAATCAAAAAAGAA 5411
DB 2 AAAAAATCAAAAAAGAA 20
RESULT 553
ABI93625
ID ABI93625 standard; DNA; 20 BP.
XX
XX ABI93625;
XX
XX 15-FEB-2002 (first entry)
XX
XX Capture oligonucleotide Zip ID#712 oligo #9.
XX
XX Human; K-ras; PCR primer; probe; capture probe; mutation detection;
XX ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
XX infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
XX oncogene; tumour suppressor; human papillomavirus; forensic;
XX environmental monitoring; food industry; feed industry; ss.
XX
XX Synthetic.
XX
XX WO200179548-A2.
XX
XX 25-OCT-2001.
XX
XX 04-APR-2001; 2001WO-US010956.
XX
XX 14-APR-2000; 2000US-01972721P.
XX
XX (CORR) CORNELL RES FOUND INC.
XX
XX Barany F, Zivvi M, Gerry NP, Favis R, Kliman R;
XX WPI, 2002-034366/04.
XX
XX 07-DEC-2001; 2001WO-US047824.
XX
XX 07-DEC-2000; 2000US-0251830P.
XX
XX 07-DEC-2001; 2001US-00016604.
XX
XX (CHIR) CHIRON CORP.
XX
XX Garcia P, Hardy SF, Williams LT, Escobedo J;
XX WPI, 2002-691475/74.
XX
XX Novel isolated polypeptides useful for diagnosis of prostate cancer.
XX
XX Claim 18; Page 146; 152pp; English.
XX
XX The invention describes novel isolated polypeptides (I, II) useful for
CC diagnosing prostate cancer comprising obtaining a patient sample
CC containing prostate cells and detecting the presence or absence of an
CC expression product of a HML-2 endogenous retrovirus in a patient sample.
CC Polynucleotides associated with (I) are useful for diagnosis or treatment
CC of testicular cancer, multiple sclerosis or insulin-dependent diabetes
CC mellitus. An inhibitor of a HML-2 protease and a transdominant negative

CC	and feed industry, detecting compliases scanning (using e.g. a scanning
CC	electron microscope and infrared microscope) the support at the
CC	particular sites and identifying if ligation of the oligonucleotide probe
CC	sees occurred and correlating (using a computer) identified ligation to a
CC	presence or absence of the target nucleotide sequences. ABI82074 to
CC	ABI97546 represent oligonucleotide sequences used in the exemplification
CC	of the present invention
XX	
XX	Sequence 20 BP, 3 A, 6 C, 6 G, 5 T, 0 U, 0 Other;
XX	
XX	Query Match 0.3%; Score 15.8; DB 1; Length 20;
XX	Best Local Similarity 89.5%; Pred. No. 7.7e+02;
XX	Matches 17, Conservative 0, Mismatches 2, Indels 0, Gaps 0;
XX	
XX	4692 GTCCTGGACCGAAGTGC 4710
XX	
XX	2 GTCCTGGACCGAAGTGC 20
XX	
XX	RESULT 554
XX	ABI94997
XX	ABI94997 standard; DNA; 20 BP.
XX	
XX	ABI94997;
XX	
XX	16-FEB-2002 (first entry)
XX	
XX	Capture oligonucleotide Zlp ID#2084 oligo #9.
XX	
XX	Human, K-ras, PCR primer; probe; capture probe; mutation detection;
XX	Ligase detection reaction, LDR; p53, BRCA1, BRCA2; infectious disease;
XX	infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
XX	oncogene; tumour suppressor; human papillomavirus; forensic;
XX	environmental monitoring; food industry; ss.
XX	
XX	Synthetic.
XX	
XX	WO200179548-A2.
XX	
XX	25-OCT-2001.
XX	
XX	04-APR-2001; 2001WO-US010958.
XX	
XX	14-APR-2000; 2000US-0197271P.
XX	
XX	(CORR) CORNELL RES FOUND INC.
XX	
XX	Barany F, Zilvi M, Gerry NP, Favis R, Kliman R;
XX	
XX	WPI; 2002-03436/04.
XX	
XX	Designing capture oligonucleotide probes for use on a support to which
XX	complementary oligonucleotides hybridize with little mismatch.
XX	
XX	Example 5; Fig 29; 300pp; English.
XX	
XX	The present invention describes a method (M1) for designing capture
XX	oligonucleotide probes (II) for use on a support to which complementary
XX	oligonucleotide probes (II) will hybridise with little mismatch, where
XX	(I) have melting temperatures within a narrow range. The method is useful
XX	for detecting infectious diseases caused by bacterial infectious agents
XX	e.g. Salmonella, listeria monocytogenes and Haemophilus influenza, fungal
XX	infectious agents e.g. Cryptococcus neoformans, Candida albicans and
XX	Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
XX	Epsilon-Barr virus and polio virus, and parasitic infectious agents
XX	selected from Onchocerca volvulus, Entamoeba histolytica and Tricunculus
XX	medineis. The method is also useful for detecting genetic diseases such
XX	as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
XX	Detecting cancer involving oncogenes, tumour suppressor genes, or genes
XX	involved in DNA amplification, replication, recombination or repair, the
XX	cancer is specifically associated with a gene selected from BRCA1 gene,
XX	p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
XX	method is also used for environmental monitoring, forensics and the food

CC	and feed industry, detecting comprises scanning (using e.g. a scanning
CC	electron microscope and infrared microscope) the support at the
CC	particular sites and identifying if ligation of the oligonucleotide probe
CC	sees occurred and correlating (using a computer) identified ligation to a
CC	presence or absence of the target nucleotide sequences. AB182074 to
CC	AB197546 represent oligonucleotide sequences used in the exemplification
CC	of the present invention
XX	
SQ	Sequence 20 BP, 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;
Query Match	0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity	89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative	0; Mismatches 2; Indels 0; Gaps 0;
Oy	3256 CAGACCTGCGCTGTGTC 3274 1 CAGACCTGAGCTGTGTC 19
Db	
RESULT 555	
ID	ABX78139 standard; DNA; 20 BP.
XX	ABX78139;
XX	ABX78139;
DT	16-APR-2003 (first entry)
XX	
DE	Murine p38-alpha MAPK antisense oligonucleotide ISIS NO 100802.
XX	
KW	p38 mitogen-activated protein kinase; p38 MAPK; phosphorothioate;
KM	antisense; antiarthritic; antiinflammatory; kinase inhibitor; mouse;
KW	inflammatory disease; rheumatoid arthritis; gene therapy; ss.
XX	
OS	Mus musculus.
XX	
Key	Location/Qualifiers
FT	modified_base 1..20
FT	/*tag= a
FT	/mod_base= OTHER
FT	/note= "nucleotides 1-5 & 16-20 are 2'-methoxyethoxy
FT	(MOE) nucleotides, nucleotides 1-4 & 16-19 are linked
FT	via phosphodiester linkages, nucleotides 6-15 are 2'-
FT	deoxy-nucleotides, nucleotides 5-16 are linked via
FT	phosphorothioate linkages, all C nucleotides are 5-
FT	methyl cytosines"
PN	US6448079-B1.
PD	10-SEP-2002.
XX	
Pf	15-AUG-2000; 2000US-00640101.
XX	
PR	06-APR-1999; 99US-00286904.
PA	(ISIS-) ISIS PHARM INC.
PI	Monia BP, Garde WA, Nero P, McKay R;
DR	WPI; 2003-089122/08.
XX	
PT	New antisense compound, useful for preparing a composition for
PT	diagnosing, treating or preventing inflammatory diseases, e.g. rheumatoid
PT	arthritis.
PS	Example 5; Col 27-28; 44pp; English.
XX	
CC	This invention describes a novel antisense compound, which is 8-30
CC	nucleobases in length targeted to a nucleic acid molecule encoding p38
CC	mitogen-activated protein kinase (MAPK). The products of the invention
CC	have antiarthritic and antiinflammatory activity, can act as act as
CC	kinase inhibitors. The antisense compound is useful for preparing a
CC	composition for diagnosing, treating or preventing inflammatory diseases,
CC	e.g. rheumatoid arthritis or for use in antisense gene therapy. This

CC sequence represents an antisense oligonucleotide used in a method to
 CC inhibit p38 MAPK

XX Sequence 20 BP; 2 A; 10 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2639 CCCTGCAGCTGCTGTGCA 2657
 |||||
 DB 1 CCCTGCAGCTGCTGTGCA 19

RESULT 556
 ACC44257/c
 ID ACC44257 standard; DNA; 20 BP.

AC ACC44257;

DT 07-JUL-2003 (first entry)

DE 5' primer to amplify v-akt homologue gene for ligand support method.

KW Primer; ss; support; ligand immobilization; activated polyanion;
 KW DNA chip; protein chip; sugar chip; biosensor.

OS Synthetic.

PN WO2003027674-A1.

PD 03-APR-2003.

PF 20-SEP-2002; 2002WO-JP009661.

PR 21-SEP-2001; 2001JP-00288149.

PA (TAKA-) TAKARA BIO INC.

PI Asada K, Imose N, Takeda O, Rokushima M, Kato I;

DR WPI; 2003-342750/32.

PT Polyanion-coated ligand immobilization support for production of DNA
 PT chips, protein chips and biosensors.

PS Example 2; Page 33; 51pp; Japanese.

XX The invention relates to a novel support for ligand immobilization, which
 CC is coated with a polyanion which has previously been activated. The
 CC support is useful for the production of DNA chips, protein chips, sugar
 CC chips and biosensors for investigative and diagnostic uses. Ligands which
 CC can be immobilized to the support include agonists, antagonists, toxins,
 CC venoms, virus epitopes, hormones, lectins, hormone receptors, peptides,
 CC nucleic acids, drugs, sugars, oligonucleotides, proteins, antigens,
 CC monoclonal antibodies, cells, viruses, and avidins. In an example of the
 CC invention, the ligand bound to the support is a PCR primer targeted to a
 CC number of genes and used to diagnose the presence and potentially the
 CC transcription of the genes. This sequence represents a 5' primer targeted
 CC to the v-akt murine thymoma viral oncogene homologue 1 gene

XX Sequence 20 BP; 5 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5167 TGTACAGGCTGAGCCCA 5185
 |||||
 DB 19 TGTACAGGCTGAGCCCA 1

RESULT 557

ACC70061/c
 ID ACC70061 standard; DNA; 20 BP.

XX ACC70061;

DT 29-JUL-2003 (first entry)

DE PCR primer for pig corticosteroid-binding globulin cDNA.

KW pig; corticosteroid-binding globulin; Cbg gene; polymorphic marker;
 KW hypercortisolemia; corticotropic acid; obesity; constitutive sensitivity;
 KW inflammatory reaction; autoimmune reaction; aging; PCR; primer; ss.

OS Sus scrofa.

PN WO2003038124-A1.

PD 08-MAY-2003.

PF 31-OCT-2002; 2002WO-FR003762.

PR 31-OCT-2001; 2001FR-00014156.

PR 26-JUL-2002; 2002FR-00009551.

PA (INRA) INRA INST NAT RECH AGRONOMIQUE.

PI Moisan M, Mormede P, Milan D, Bidanel J, Onsova O;

DR WPI; 2003-430536/40.

PT Identifying polymorphic markers associated with hypercortisolemia, useful
 PT for diagnosis of dysfunction of the corticotropic axis and for selection
 PT of breeding animals.

PS Disclosure; Page 16; 50pp; French.

XX PCR primers ACC70061-62 were used to amplify cDNA encoding a pig
 CC corticosteroid-binding globulin (Cbg). The specification describes a
 CC method of identifying polymorphic markers associated with the
 CC hypercortisolemia phenotype. The method comprises comparing nucleic acid
 CC sequences, from many individuals, that contain at least part of the Cbg
 CC gene and identifying mutations in this gene or adjacent sequences. The
 CC method is used for diagnosis of hypercortisolemia, or predisposition to
 CC it, for identifying dysfunction of the corticotropic acid and associated
 CC diseases, e.g. obesity; constitutive sensitivity to inflammatory or
 CC autoimmune reactions; aging (especially cognitive) or sensitivity to
 CC illicit drugs. It is also useful for (counter-)selection of breeding
 CC animals, especially pigs, with a high probability of developing
 CC hypercortisolemia and obesity

XX Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 652 CAGCCAGAGACGAGTG 670
 |||||
 DB 20 CAGCCAGAGACGAGTG 2

RESULT 558

ACC85486/c
 ID ACC85486 standard; DNA; 20 BP.

AC ACC85486;

DT 29-SEP-2003 (first entry)

DE Human HEX-A gene PCR primer SEQ ID NO: 1.

KW late PCR; polymerase chain reaction; human; CFTR; HEX-A; limiting primer;
 KW excess primer; PCR; primer; ss.

OS	Homo sapiens.
XX	
PN	WO2003054233-A1.
XX	
PD	03-JUL-2003.
XX	
PP	19-DEC-2002; 2002MO-US040752.
XX	
PR	19-DEC-2001; 2001US-034186P.
PR	17-DEC-2002; 2002US-00320893.
PA	(UYBR-) UNIV BRANDIS.
XX	
PI	Wangh LJ, Pierce K, Hartshorn C, Rice J, Sanchez JA;
XX	
DR	WPI; 2003-569258/53.
PT	Non-symmetric polymerase chain reaction amplification, useful for
PT	amplifying DNA by thermally cycling a PCR reaction mixture containing a
PT	DNA amplification target sequence, a pair of PCR primers, dntp's and
PT	thermostable polymerase.
PS	
XX	Example 1; Page 66; 125pp; English.
CC	The present invention relates to a method of non-symmetric polymerase
CC	chain reaction (PCR) amplification, comprising thermally cycling a PCR
CC	reaction mixture containing a DNA amplification target sequence, a pair
CC	of PCR primers, dntp's and thermostable polymerase repeatedly through PCR
CC	steps of strand melting, primer annealing, and primer extension. The
CC	method is useful for amplifying stretches of DNA, including cDNA reverse
CC	transcribed from RNA, for assays, for diagnostics and other purposes. The
CC	present sequence is a primer used to demonstrate the method of the
XX	invention
SQ	
Sequence	20 BP; 0 A; 10 C; 3 G; 7 T; 0 U; 0 Other;
Query Match	0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity	89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative	0; Mismatches 2; Indels 0; Gaps 0;
OY	909 CCAGGCTCAGAGAAGG 927
DB	19 CCAGGGGCAGAGAGAAG 1
RESULT 559	
AAL61584/c	
ID	AAL61584 standard; DNA; 20 BP.
XX	
AC	AAL61584;
XX	
DT	22-SEP-2003 (first entry)
XX	
DE	Human inhibitor-kappa B-R antisense oligonucleotide, ISIS #130509.
XX	
KM	Human; inhibitor-kappa B-R; I-kappaB; IKK; I-kappa-B-related; NFkBii2;
KM	kappab r; antisense; immune response; infection; inflammation; therapy;
KM	tumour; pyrophylaxis; phosphorochloate; ss.
XX	
OS	Homo sapiens.
OS	Synthetic.
XX	
FH	Key
FT	modified_base
FT	Location/Qualifiers
FT	1..20
FT	/tag= a
FT	/mod_base= OTHER
FT	/note= "Phosphorochloate backbone; All cytidine residues
FT	are 5-methylcytidines"
FT	1..5
FT	/tag= b
FT	/mod_base= OTHER
FT	/note= "2'-methoxyethyl (2'-MOE) nucleotides"

FT		modified_base	16..20	
FT		/+tag= c		
FT		/mod_base= OTHER		
FT		/note= "2'-methoxyethyl (2'-MOE) nucleotides"		
XX				
PN		WO2003042360-A2.		
PD				
PD		22-MAY-2003.		
PP				
PP		05-NOV-2002; 2002WO-US035597.		
PR				
PR		13-NOV-2001; 2001US-00993731.		
PA		(ISIS-) ISIS PHARM INC.		
PI				
PI		Monia BP, Watt AT;		
DR				
DR		WPI; 2003-468635/44.		
PT				
PT		New antisense oligonucleotides targeted to nucleic acids encoding inhibitor-kappa B-R, useful for diagnosing or treating diseases associated with expression of inhibitor-kappa B-R, e.g., a heightened immune response or infection.		
PS				
PS		Claim 3; Page 75; 10Bpp; English.		
XX				
CC		The invention relates to antisense compounds targetted to a nucleic acid		
CC		molecule encoding human inhibitor-kappa B-R (also known as I-kappaB β ,		
CC		Ikkr, I-kappa-B-related, Ikappab r, nuclear factor of kappa light		
CC		polypeptides gene enhancer in B-cells inhibitor-like 2 and NFkBIL2) to		
CC		inhibit its expression. Antisense compounds of the invention are useful		
CC		for treating diseases or conditions associated with the expression of		
CC		inhibitor-kappa B-R such as a heightened immune response involving		
CC		increased cytokine expression, or a result of infection (e.g. bacterial,		
CC		viral or parasitic). They are useful for diagnostic, therapeutic,		
CC		prophylaxis e.g. to prevent or delay infection, inflammation or tumour		
CC		formation, as research reagents and kits and in distinguishing between		
CC		functions of various members of a biological pathway. They are also		
CC		useful in antisense therapy. The present sequence is an oligonucleotide		
CC		targeted to human inhibitor-kappa B-R DNA		
SQ				
SQ		Sequence 20 BP; 3 A; 7 C; 7 G; 3 T; 0 U; 0 Other;		
		Query Match	0.3%; Score 15.8; DB 1; Length 20;	
		Best Local Similarity	89.5%; Pred. No. 7.7e+02;	
		Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;		
CY				
CY		2642 TGAGCGTGCCTGACGCC 2660		
DB		20 TGAGCGTGCCTGACGCC 2		
		RESULT 560		
		ADG25637		
ID		ADG25637 standard; DNA; 20 BP.		
XX				
XX		ADG25637;		
DT				
DT		26-FEB-2004 (first entry)		
DE		Tobacco SHMT PCR primer SHMT1*2 #1.		
XX				
KW		plant; herbicide; serine hydroxymethyltransferase; SHMT;		
KW		plant growth regulator; desiccant; defoliant; herbicide resistance;		
KW		transgenic plant; mitochondrial; ss; primer; PCR.		
OS		Nicotiana tabacum.		
XX				
PM		WO2003078613-A2.		
XX				
DD		25-SEP-2003.		
XX				
FP		13-MAR-2003; 2003WO-EPO02574.		

XX 20-MAR-2002; 2002DE-01012469.
PR (BADI) BASF AG.
XX
XX
PI Sonnenwald U, Boernke F, Deist K, Stitt Nigel M, Lein W;
PI Einhardt T, Reindl A, Schmidt R, Freund A;
XX WPI; 2003-788210/74.
XX
XX New plant nucleic acid, useful in screening for herbicides and for
PT preparing herbicide-resistant plants, encodes serine
PT hydroxymethyltransferase, also new polypeptides.
XX
XX Example 4; Page 50; 70pp; German.
XX
XX This invention describes the novel use of plant nucleic acids, as targets
CC for herbicides and encoding a polypeptide with serine
CC hydroxymethyltransferase (SHMT) activity. The products of the invention
CC are used to identify new (selective) herbicides or plant growth
CC regulators, e.g. desiccants or defoliants. The nucleic acids are also to
CC generate mutants that encode enzymes resistant to particular herbicides,
CC these mutants are used to prepare transgenic plants resistant to such
CC herbicides. This sequence represents a PCR primer used to amplify the
CC tobacco SHMT gene and allows the gene to be expressed in E. coli.
XX
SQ Sequence 20 BP; 10 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1175 AATCAGAGAAAGAGAG 1193
DB 1 AAACGAGATGAGAGAG 19
|||||
|
RESULT 561
AB288038/c
ID AB288038 standard; DNA; 20 BP.
XX
XX AB288038;
XX
XX 17-OCT-2003 (first entry)
XX
XX Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; de.
XX
XX Homo sapiens.
OS
XX
XX WO200285308-A2.
PN
XX
XX 31-OCT-2002.
PD
XX
XX 23-APR-2002; 2002WO-US013135.
PF
XX
XX 24-APR-2001; 2001US-0286137P.
PR
XX
XX (EPIC-) EPIGENESIS PHARM INC.
PA
XX
XX Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX
PS Disclosure; SEQ ID NO 3280; 872pp; English.
XX
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 3 A; 7 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2641 CTGCAGCTGCTGCTGAGC 2659
DB 19 CTGCAGCTGCTGCTGCGGC 1
|||||
|
RESULT 562
AB285534
ID AB285534 standard; DNA; 20 BP.
XX
XX AB285534;
XX
XX 17-OCT-2003 (first entry)
XX
XX Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; de.
XX
XX Homo sapiens.
OS
XX
XX WO200285308-A2.
PN
XX
XX 31-OCT-2002.
PD
XX
XX 23-APR-2002; 2002WO-US013135.
PF
XX
XX 24-APR-2001; 2001US-0286137P.
PR
XX
XX (EPIC-) EPIGENESIS PHARM INC.
PA
XX
XX Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its

PT	corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT	ubiquinone.
XX	
PS	Claim 15; SEQ ID NO 776; 872bp; English.
XX	
CC	The invention relates to a novel pharmaceutical composition, which has a
CC	first active agent comprising an oligonucleotide antisense to the
CC	initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC	5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC	junctions of genes encoding a polypeptide associated with lung and/or
CC	nasal airway dysfunction and a second active agent comprising an
CC	antiinflammatory steroid and ubiquinone. A composition of the invention
CC	has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC	immunosuppressive, and cytostatic activity. The composition may have a
CC	use in antisense gene therapy. The composition is useful for treating or
CC	preventing a respiratory, lung or malignant disease or condition, also
CC	for enhancing the prophylactic or therapeutic respiratory effect of an
CC	antiinflammatory steroid in a subject, for reducing or depleting levels
CC	of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC	receptor, producing bronchodilation, increasing levels of ubiquinone or
CC	lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC	lung inflammation, lung allergies, or a respiratory disease or condition.
CC	Note: The sequence data for this patent is not represented in the printed
CC	specification, but was obtained in electronic format directly from WIPO
CC	at ftp.wipo.int/pub/published_pct_sequences
XX	
SQ	Sequence 20 BP; 18 A; 0 C; 2 G; 0 T; 0 U; 0 Other;
	Query March 0.3%; Score 15.8; DB 1; Length 20;
	Best Local Similarity 89.5%; Pred. No. 7.7e+02;
	Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0
QY	5395 AAAAATACAAAAGAAAA 5413
Db	1 AAAAAAAAAAAAAAAAAAAAA 19
RESULT 563	
ABZ90836	
ID	ABZ90836 standard; DNA; 20 BP.
XX	
AC	ABZ90836;
XX	
DT	17-OCT-2003 (first entry)
XX	
DB	Human oligonucleotide sequence.
XX	
KM	Human; antisense; lung dysfunction; nasal airway dysfunction;
KM	antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KM	antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KM	antisense gene therapy; respiratory; lung; adenosine sensitivity;
KM	adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KM	lung inflammation; respiratory disease; ds.
XX	
OS	Homo sapiens.
XX	
PN	WO200285308-A2.
XX	
PD	31-OCT-2002.
XX	
PF	23-APR-2002; 2002WO-US013135.
XX	
PR	24-APR-2001; 2001US-0286137P.
XX	
PA	(EP1G-) EPIGENESIS PHARM INC.
XX	
PI	Nyce JM, Li Y, Sandraasgra A, Katz E, Pabalan J, Aguiar D,
PI	Miller S, Tang L, Shahabuddin S;
XX	
DR	WPI; 2003-229219/22.
XX	
PT	Pharmaceutical composition for treating ailments associated with impaired
PT	respiration, has oligo(e) antisense to specific gene(s) or its

corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone.

Disclosure; SEQ ID NO 6078; 872pp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, has immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergy, or a respiratory disease or condition.

Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIGO at [ftp.wigo.int/pub/published_pcf_sequences](http://wigo.int/pub/published_pcf_sequences)

Sequence 20 BP; 6 A; 2 C; 9 G; 3 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0.

2945 GAACCTGAGAGCTGGA 2963
|||||
1 GAAGCTGAGAGTGTGGA 19

Db

RESULT 564
ABZ85670/C
ID ABZ85670 standard; DNA; 20 BP.
XX
XX ABZ85670;
XX
XX 17-OCT-2003 (first entry)
XX
XX Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIC-) EPICGENESIS PHARM INC.
XX
XX Nyce JM, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
XX respiration, has oligo(s) antisense to specific gene(s) or its

CC corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone.

Claim 15; SEQ ID NO 912; 872bp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an anti-inflammatory steroid and ubiquinone. A composition of the invention has anti-inflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an anti-inflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 20 BP; 1 A; 2 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0.

5403 AAAAAAGAAAAATGAAAA 5421
|||||
19 AAAATGAAAAAAGAAAA 1

RESULT 565
ABZ87765
ID ABZ87765 standard; DNA; 20 BP.
XX
XX ABZ87765;
XX
XX 17-OCT-2003 (first entry)
XX
XX Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX OS
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIC-) EPIGENESIS PHARM INC.
XX
XX NYCE JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D,
XX Miller S, Tang L, Shahbuddin S,
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
XX respiration, has oligo(s) antisense to specific gene(s) or its

PT	corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT	ubiquinone.
PS	Disclosure; SEQ ID NO 3007; 872bp; English.
XX	
XX	The invention relates to a novel pharmaceutical composition, which has a
CC	first active agent comprising an oligonucleotide antisense to the
CC	initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC	5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC	junctions of genes encoding a polypeptide associated with lung and/or
CC	nasal airway dysfunction and a second active agent comprising an
CC	antiinflammatory steroid and ubiquinone. A composition of the invention
CC	has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC	immunosuppressive, and cytostatic activity. The composition may have a
CC	use in antisense gene therapy. The composition is useful for treating or
CC	preventing a respiratory, lung or malignant disease or condition, also
CC	for enhancing the prophylactic or therapeutic respiratory effect of an
CC	antiinflammatory steroid in a subject, for reducing or depleting levels
CC	of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC	receptor, producing bronchodilation, increasing levels of ubiquinone or
CC	lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC	lung inflammation, lung allergies, or a respiratory disease or condition.
CC	Note: The sequence data for this patent is not represented in the printed
CC	specification, but was obtained in electronic format directly from WIPO
CC	at ftp.wipo.int/pub/published_pct_sequences
XX	
XX	Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;
XX	
Query Match	0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity	89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	
Oy	2833 GAGGCGCAGGCGACAGAT 2851
DB	2 GAGGCGCAGGCGACAGAT 20
RESULT 566	
ABZ98968	
ID	ABZ98968 standard; DNA; 20 BP.
AC	ABZ98968;
DT	17-OCT-2003 (first entry)
XX	
DE	Human PDE4A oligonucleotide sequence.
XX	
KW	Human; antisense; lung dysfunction; nasal airway dysfunction;
KW	antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW	antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW	antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW	adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW	lung inflammation; respiratory disease; ds.
XX	
OS	Homo sapiens.
XX	
PN	WO200285308-A2.
XX	
PD	31-OCT-2002.
XX	
PF	23-APR-2002; 2002WO-US013135.
XX	
PR	24-APR-2001; 2001US-0286137P.
XX	
PA	(EPRIG-) EPIGENESIS PHARM INC.
XX	
PI	Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D,
PI	Miller S, Tang L, Shahbuddin S,
XX	
DR	WPI; 2003-229219/22.
XX	
PT	Pharmaceutical composition for treating ailments associated with impaired
PT	respiration, has oligo(s) antisense to specific gene(s) or its

PT		corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
FT		ubiquinone.
XX		
PS		Disclosure; SEQ ID NO 14210; 872pp; English.
XX		
CC		The invention relates to a novel pharmaceutical composition, which has a
CC		first active agent comprising an oligonucleotide antisense to the
CC		initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC		5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC		junctions of genes encoding a polypeptide associated with lung and/or
CC		nasal airway dysfunction and a second active agent comprising an
CC		anti-inflammatory steroid and ubiquinone. A composition of the invention
CC		has anti-inflammatory, antiallergic, antiasthmatic, hypotensive,
CC		immunosuppressive, and cytostatic activity. The composition may have a
CC		use in antisense gene therapy. The composition is useful for treating or
CC		preventing a respiratory, lung or malignant disease or condition, also
CC		for enhancing the prophylactic or therapeutic respiratory effect of an
CC		anti-inflammatory steroid in a subject, for reducing or depleting levels
CC		of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC		receptor, producing bronchodilation, increasing levels of ubiquinone or
CC		lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC		lung inflammation, lung allergies, or a respiratory disease or condition.
CC		Note: The sequence data for this patent is not represented in the printed
CC		specification, but was obtained in electronic format directly from WINDO
CC		at ftp.wipo.int/pub/published_pct_sequences
XX		
SQ		Sequence 20 BP, 4 A, 7 C, 6 G, 3 T, 0 U, 0 Other;
		Query Match 0.3%; Score 15.8; DB 1; Length 20;
		Best Local Similarity 89.5%; Pred. No. 7.7e+02;
		Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY		
		3215 GACTGCAGCTGTGACGCTG 3233 1 GACTGCAGCAGCTCACGCTG 19
Dn		
		RESULT 567
		ACC47647/C
ID		ACC47647 standard; DNA; 20 BP.
XX		
AC		ACC47647;
XX		
DT		16-SEP-2003 (first entry)
XX		
DE		Human IGFBP5 phosphorothioate antisense oligonucleotide, SEQ ID NO:23.
XX		
KW		Human; insulin-like growth factor binding protein 5; IGFBP5; IBP5;
KM		chromosome 2q33-34; IGF signal transduction; IGF regulation; apoptosis;
KM		bone growth stimulator; hyperproliferative disorder; cancer; tumour;
KM		breast; prostate; pancreas; neuroendocrine; inflammatory disorder;
KM		Cushing's developmental disorder; growth disorder;
KM		Duchenne muscular dystrophy; metabolic disorder; diabetes; osteoporosis;
KW		osteoporosis; cytoskeletal; anti-inflammatory; expression inhibition;
KM		phosphorothioate; antisense oligonucleotide; ss.
XX		
OS		Homo sapiens.
XX		
FH		Key
FT		modified_base
FT		Location/Qualifiers
FT		1..20
FT		/*tag= a
FT		/mod_base= OTHER
FT		/note= "This oligonucleotide has a phosphorothioate
FT		backbone and 2-'methoxyethyl (2'-MOE) wings at the 5'
FT		and 3' ends, which are 5 nucleotides in length. Also all
FT		cytosine residues are 5-methylcytosines"
XX		
PN		WO2003030826-A2.
XX		
BD		17-APR-2003.
XX		
PF		07-OCT-2002; 2002WO-US032060.
XX		

PR	09-OCT-2001; 2001US-00975123.
XX	(ISIS-) ISIS PHARM INC.
PA	
P1	Preler SM;
DR	WPI; 2003-381673/36.
XX	
PT	New antisense oligonucleotides for modulating insulin-like growth factor binding protein 5 gene expression, useful for preventing or treating cancers, inflammatory disorders, developmental disorders or metabolic disorders.
XX	
PS	Claim 3; Page 76; 105pp; English.
XX	
CC	Sequences ACC47637-ACC47667 represent phosphothioate antisense oligonucleotides targeted to the human insulin-like growth factor binding protein 5 (IGFBP5) gene, which inhibit its expression. The antisense oligonucleotides were designed to target different regions of human IGFBP5 RNA, and were analysed for their effect on IGFBP5 expression by quantitative real-time PCR. IGFBP5 (also known as IBP5) is a member of the insulin-like growth factor superfamily, which are involved in the regulation of IGF action and bioavailability, and which also mediate IGF-independent actions, including inhibition or enhancement of apoptosis. IGFBP5 is a key component of the IGF system in bone, having a high specific binding affinity for hydroxyapatite and extracellular matrix proteins, and appears to act as a growth factor, stimulating bone formation via an IGF-independent mechanism. IGFBP5 is also expressed in other tissues, such as kidney, liver, gut endothelium, lung tubules and meninges, meninges, notochord, muscle and tongue. Its levels are also increased in inflamed colon smooth muscle cells in an experimental model of colitis. It is also thought to play a role in prostate cancer progression, is expressed with high frequency in neuroendocrine tumours, and has been shown to be induced in breast cancer cells upon treatment with antiestrogens used to abolish tamoxifen resistant proliferation. The oligonucleotides of the invention are useful for diagnosis, prevention and treatment of IGFBP5-related disorders, such as hyperproliferative disorders (particularly cancers of the breast, prostate, pancreas or neuroendocrine system), inflammatory disorders (e.g., colitis), developmental or growth disorders (e.g., Duchenne muscular dystrophy), or metabolic disorders (e.g., diabetes, osteoporosis, or osteopetrosis)
CC	
CC	Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
SQ	
XX	
Query Match	0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity	89.5%; Pred. No. 7.7e+02;
Matches	17; Conservative 0; Mismatches 2; Indels 0; Gaps 0,
OY	1634 AGCTGGCCCACTCCAAGT 1652
DB	19 AGGTGACCCACTCAGAATT 1
RESULT 568	
ID	ADTM34276
XX	ADTM34276 standard; DNA; 20 BP.
AC	
DT	03-JUN-2004 (first entry)
DE	Mouse p38 MAPK antisense oligonucleotide #3.
KM	antisense; p38 mitogen activated protein kinase; p38 MAPK; inflammatory disease; autoimmune disease; rheumatoid arthritis; heart disease; ss; mouse.
OS	Mus musculus.
Key	Location/Qualifiers
FT	modified_base 1..20
FT	/tag= b

```
FT      /mod_base= Other
FT      /note= "All cytosines are 5-methyl cytosines"
FT      modified_base
FT      1..5
FT      /+tag= a
FT      /mod_base= Other
FT      /note= "2'-methoxyethoxy nucleotides"
FT      modified_base
FT      6..15
FT      /+tag= c
FT      /mod_base= Other
FT      /note= "Phosphorothioate linkages"
FT      modified_base
FT      16..20
FT      /+tag= d
FT      /mod_base= Other
FT      /note= "2'-methoxyethoxy nucleotides"
FT      US2003176383-A1.
XX      18-SEP-2003.
XX      09-SEP-2002; 2002US-00238442.
XX      06-APR-1999; 99US-00286904.
XX      15-AUG-2000; 2000US-00640101.
XX      (MONI/) MONIA B P.
XX      (GAAR/) GAARDE W A.
XX      (NERO/) NERO P.
XX      (MCKA/) MCKAY R.
XX      Monia BP, Gaarde WA, Nero P, McKay R;
XX      WPI; 2003-898587/82.
XX      New antisense oligonucleotides for modulating p38 mitogen activated
XX      PT protein kinase (MAPK) expression, useful for diagnosing, preventing or
XX      PT treating diseases associated with p38 MAPK, e.g. inflammation or heart
XX      PT disease.
XX      Example 5; SEQ ID NO 65; 48pp; English.
XX      The invention relates to an antisense oligonucleotide 8-30 nucleobases in
XX      CC length targeted to the 5'-untranslated region, translational start site,
XX      CC translational termination region or 3'-untranslated region of a nucleic
XX      CC acid molecule encoding a p38 mitogen activated protein kinase (MAPK),
XX      CC where the antisense compound inhibits the expression of the p38 MAPK. The
XX      CC antisense oligonucleotide is useful for inhibiting the expression of p38
XX      CC MAPK in cells or tissues. It is also useful for treating an animal having
XX      CC a disease or condition associated with p38 MAPK, e.g. an inflammatory or
XX      CC an autoimmune disease (e.g. rheumatoid arthritis) or a heart disease. In
XX      CC addition, the compound is used for diagnostics, prophylaxis, or as
XX      CC research reagents or kits. The present sequence represents a p38 MAPK
XX      CC antisense oligonucleotide of the invention.
XX      SO Sequence 20 BP; 2 A; 10 C; 6 G; 2 T; 0 U; 0 Other;
XX      Query Match 0.3%; Score 15.8; DB 1; Length 20;
XX      Best Local Similarity 89.5%; Pred. No. 7.7e+02;
XX      Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY      2639 CCCTGACGCTGCTGCTGCA 2657
DB      1 CCCTGACGCGCTGCGGCA 19
RESULT 569
ABD24268/C
ID ABD24268 standard; DNA; 20 BP.
XX
XX ABD24268;
AC
XX
XX 29-JUL-2004 (first entry)
DT
XX
XX Human calmodulin 2-derived oligonucleotide SEQ ID 3280.
```

```
XX      Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX      KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX      KW surfactant depletion; immunosuppressive; antiinflammatory; antiasthmatic;
XX      KW analgesic; hypotensive; antitumor; cytostatic; cystic fibrosis;
XX      KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX      KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX      KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX      KW pulmonary transplantation rejection; ss; primer.
XX      OS Homo sapiens.
XX      PN WO200285309-A2.
XX      PD 31-OCT-2002.
XX      23-APR-2002; 2002WO-US013143.
XX      24-APR-2001; 2001US-0286036P.
XX      (EPIG-) EPIGENESIS PHARM INC.
XX      PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX      PI Miller S, Tang L, Shahabuddin S;
XX      DR WPI; 2003-093058/08.
XX      Pharmaceutical composition for treating asthma, has antisense
XX      PT oligonucleotide containing less percentage of adenosine, targeted to
XX      PT nucleic acids associated with lung airway or lung dysfunction, and
XX      PT bronchodilating agent.
XX      Claim 15; SEQ ID NO 3280; 763pp; English.
XX      This invention describes a novel composition (a) a first active agent,
XX      CC comprising oligonucleotides, effective for alleviating
XX      CC bronchoconstriction, respiratory tract inflammation, allergies and
XX      CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX      CC surfactant depletion or hyposecretion, when administered to a mammal. The
XX      CC oligonucleotides are derived from a gene encoding or regulating
XX      CC expression of a target polypeptide associated with lung airway or lung
XX      CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX      CC The invention also describes a kit, that comprises: (a) a delivery
XX      CC device, in separate containers, (b) the oligonucleotides, (c)
XX      CC instructions for adding a carrier and for use of the kit. The composition
XX      CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX      CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX      CC beta-adrenergic agonist. The composition is useful for preventing or
XX      CC treating a respiratory, lung or malignant disease. The administered
XX      CC composition comprises oligo and is administered to reduce the production
XX      CC or availability, or to increase the degradation of the target mRNA or to
XX      CC reduce the amount of target polypeptide present in the lungs. The
XX      CC pulmonary obstruction, and/or bronchoconstriction and/or lung
XX      CC inflammation, allergies and/or surfactant hypoproduction are associated
XX      CC with a disease or condition such as pulmonary vasoconstriction,
XX      CC inflammation, allergies, asthma, impeded respiration, respiratory
XX      CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX      CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
XX      CC transplantation rejection, pulmonary infections, bronchitis or cancer.
XX      CC The reduced adenosine content of the anti-sense oligos corresponding to
XX      CC thymidines present in the target RNA serves to prevent the breakdown of
XX      CC the oligonucleotides into products that free adenosine into the system
XX      CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX      CC prevent any unwanted effects due to it
XX      SO Sequence 20 BP; 3 A; 7 C; 9 G; 1 T; 0 U; 0 Other;
XX      Query Match 0.3%; Score 15.8; DB 1; Length 20;
XX      Best Local Similarity 89.5%; Pred. No. 7.7e+02;
XX      Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY      2641 CTGACGCTGCTGCTGACG 2659
XXXXXXXXXXXXXXXXXXXX
```


Db	19	CTGCAGCTGCTGCCCGCCG 1
RESULT 570		
ABD27066		
ID	ABD27066	standard, DNA, 20 BP.
XX		
AC	ABD27066;	
XX		
DT	29-JUL-2004	(first entry)
XX		
DE	H93087-derived oligonucleotide SEQ ID 6078.	
XX		
KW	Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;	
KW	respiratory tract inflammation; adenosine sensitivity; lung; cancer;	
KW	antitussive; antiallergic; antiinflammation; antiasthmatic;	
KW	analgesic; hypotensive; immunosuppressive; cytoskeletal; cystic fibrosis;	
KW	beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;	
KW	respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;	
KW	emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;	
KW	pulmonary transplantation rejection; ss; primer.	
XX		
OS	Homo sapiens.	
XX		
PN	WO200285309-A2.	
XX		
PD	31-OCT-2002.	
XX		
PF	23-APR-2002; 2002WO-US013143.	
XX		
PR	24-APR-2001; 2001US-0286036P.	
XX		
XX	(EPIG-1) EPIGENESIS PHARM INC.	
XX		
PI	Ngee JW, Li Y, Sandrasagra A, Katz B, Pabalan J, Aguilar D;	
PI	Miller S, Tang L, Shahabuddin S,	
DR	WPI; 2003-093058/08.	
XX		
PT	Pharmaceutical composition for treating asthma, has antisense	
PT	oligonucleotide containing less percentage of adenosine, targeted to	
PT	nucleic acids associated with lung airway or lung dysfunction, and	
PT	bronchodilating agent.	
XX		
XX	Claim 15; SEQ ID NO 6078; 763p; English.	
XX		
CC	This invention describes a novel composition (a) a first active agent,	
CC	comprising oligonucleotides, effective for alleviating	
CC	bronchoconstriction, respiratory tract inflammation, allergies and	
CC	reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,	
CC	surfactant depletion or hyposecretion, when administered to a mammal. The	
CC	oligonucleotides are derived from a gene encoding or regulating	
CC	expression of a target polypeptide associated with lung airway or lung	
CC	dysfunction or cancer and can be anti-sense to the corresponding mRNA.	
CC	The invention also describes a kit, that comprises: (a) a delivery	
CC	device, in separate containers, (b) the oligonucleotides, (c)	
CC	instructions for adding a carrier and for use of the kit. The composition	
CC	of the invention has anti-allergic, anti-inflammatory, antiasthmatic,	
CC	analgesic, hypotensive, immunosuppressive and cytoskeletal activity, is a	
CC	beta-adrenergic agonist. The composition is useful for preventing or	
CC	treating a respiratory, lung or malignant disease. The administered	
CC	composition comprises oligo and is administered to reduce the production	
CC	or availability, or to increase the degradation of the target mRNA or to	
CC	reduce the amount of target polypeptide present in the lungs. The	
CC	pulmonary obstruction, and/or bronchoconstriction and/or lung	
CC	inflammation, allergies and/or surfactant hypoproduction are associated	
CC	with a disease or condition such as pulmonary vasoconstriction,	
CC	inflammation, allergies, asthma, impeded respiration, respiratory	
CC	diseases syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary	
CC	hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary	
CC	transplantation rejection, pulmonary infections, bronchitis or cancer.	
CC	The reduced adenosine content of the anti-sense oligos corresponding to	
CC	thymidines present in the target RNA serves to prevent the breakdown of	

CC	the oligonucleotides into products that fire adenosine into the system
CC	e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC	prevent any unwanted effects due to it
XX	
SQ	Sequence 20 BP; 6 A; 2 C; 9 G; 3 T; 0 U; 0 Other;
OY	2945 GAAACCTGAAGACTGGA 2963 1 GAAAGCTGAAGTGTCTGGA 19
Db	
RESULT 571	
ABD21900/c	
ID ABD21900 standard; DNA; 20 BP.	
XX	
AC ABD21900;	
XX	
DT 29-JUL-2004 (first entry)	
XX	
DE Human etanlocalcin-derived oligo SEQ ID 912.	
XX	
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;	
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;	
KW surfactant depletion; anti-allergic; anti-inflammatory; antiaesthetic;	
KW analgesic; hypotensive; immunosuppressive; cystostatic; cystic fibrosis;	
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;	
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;	
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;	
KW pulmonary transplantation rejection; ss; primer.	
XX	
OS Homo sapiens.	
XX	
PM WO200285309-A2.	
XX	
PD 31-OCT-2002.	
XX	
PF 23-APR-2002; 2002WO-US033143.	
XX	
PR 24-APR-2001; 2001US-0286036P.	
XX	
PA (EPIG-) EPIGENESIS PHARM INC.	
XX	
PI Nye JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;	
PI Miller S, Tang L, Shahbuddin S;	
XX	
DR WP1; 2003-093058/08.	
XX	
PT Pharmaceutical composition for treating asthma, has antisense	
PT oligonucleotide containing less percentage of adenosine, targeted to	
PT nucleic acids associated with lung airway or lung dysfunction, and	
PT bronchodilating agent.	
XX	
PS Claim 15; SEQ ID NO 912; 763pp; English.	
XX	
CC This invention describes a novel composition (a) a first active agent,	
CC comprising oligonucleotides, effective for alleviating	
CC bronchoconstriction, respiratory tract inflammation, allergies and	
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,	
CC surfactant depletion or hyposecretion, when administered to a mammal. The	
CC oligonucleotides are derived from a gene encoding or regulating	
CC expression of a target polypeptide associated with lung airway or lung	
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.	
CC The invention also describes a kit, that comprises: (a) a delivery	
CC device, in separate containers, (b) the oligonucleotides, (c)	
CC instructions for adding a carrier and for use of the kit. The composition	
CC of the invention has anti-allergic, anti-inflammatory, antispasmodic,	
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a	
CC beta-adrenergic agonist. The composition is useful for preventing or	
CC treating a respiratory, lung or malignant disease. The administered	

CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
CC
SQ Sequence 20 BP; 1 A; 2 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5403 AAAAAGAAAATGAAA 5421
DB 19 AAAATGAAAAAGAAAA 1

RESULT 572
ABD21764
ID ABD21764 standard; DNA; 20 BP.
XX ABD21764;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human strainlocalcin-derived oligo SEQ ID 776.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
EN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US011143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
XX (EP1G-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR MPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 776; 763bp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and

CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or surfactant hypoproduction and/or lung
CC inflammation, allergies and/or bronchoconstriction and/or lung
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
CC
SQ Sequence 20 BP; 18 A; 0 C; 2 G; 0 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5395 AAAATACAAAAAGAAA 5413
DB 1 AAAAAGAAAAAGAAAA 19

RESULT 573
ABD31999
ID ABD31999 standard; DNA; 20 BP.
XX ABD31999;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human PDB4A-derived oligonucleotide SEQ ID 14210.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
EN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US011143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
XX (EP1G-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX

DR WPI; 2003-093058/08.
 XX
 PT Pharmaceutical composition for treating asthma, has antisease
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15, SEQ ID NO 14210; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 CC
 XX
 SQ Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3215 GACTGACGTGTGTGACGCTG 3233
 Db 1 GACTGACGACGCTGACGCTG 19
 RESULT 574
 ABD23995
 ID ABD23995 standard; DNA; 20 BP.
 AC ABD23995;
 XX
 DT 29-JUL-2004. (first entry)
 XX
 DB Human calmodulin 2-derived oligonucleotide SEQ ID 3007.
 XX
 KW Human; antisease; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.

XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIC-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D,
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 CC
 XX
 SQ Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2833 GAGGCGACGACGACGACGAT 2851
 Db 2 GAGGCGACGACGACGACGAT 20
 RESULT 575
 ADF66213/c
 ID ADF66213 standard; DNA; 20 BP.
 XX
 AC ADF66213;
 XX
 DT 26-FEB-2004. (first entry)
 XX
 DE Ians gene related PCR primer SEQ ID NO:32.
 XX

XX	GA065; type 1 diabetes; rat; Ians(+); Ians(1yp); Ians; antidiabetic;
XX	gene therapy; diabetes; PCR primer; ss.
XX	Synthetic.
XX	Rattus sp.
XX	MO2003102147-A2.
XX	11-DEC-2003.
XX	29-MAY-2003; 2003WO-US017206.
XX	29-MAY-2002; 2002US-0383913P.
XX	(UNIW) UNIV WASHINGTON.
XX	Lenmark A, Luo D, Macmurray A, Etinger RA, Moralejo D;
XX	Rutledge EA;
XX	WPI; 2004-053464/05.
XX	Example 2; SEQ ID NO 32; 87pp; English.
XX	The present invention describes a GAD65 polypeptide comprising an E517P
XX	mutation. The polypeptide is characterised by decreased specific binding
XX	to an antibody selected from GAD6, MICA-1, MICA-3, MICA-4 and MICA-6,
XX	where the decreased binding is relative to a corresponding GAD65
XX	polypeptide not having the E517P mutation. Also described: (1) methods
XX	for detecting the presence of or risk of type 1 diabetes in a subject;
XX	(2) an isolated nucleic acid selected from: (a) nucleic acids which
XX	encode the rat Ians(+) polypeptide; (b) nucleic acids which encode the
XX	rat Ians(1yp) polypeptide; or (c) full length complements of the nucleic
XX	acids of (a) or (b); (3) an antibody that: (a) specifically binds to rat
XX	Ians(+) polypeptide, where the antibody is not immunologically cross-
XX	reactive with human Ians or mouse Ians polypeptide; or (b) specifically
XX	binds to rat Ians(1yp) polypeptide, where the antibody is not
XX	immunologically cross-reactive with rat Ians(+), human Ians or mouse Ians
XX	polypeptide; (4) an expression construct comprising the following
XX	elements linked in operable combination: a transcriptional promoter, a
XX	nucleic acid described above, and a transcriptional terminator; (5) a
XX	prokaryotic or eukaryotic cell transformed or transfected with the
XX	expression construct described above; (6) a vector comprising the
XX	expression construct described above; (7) an isolated host cell
XX	comprising the vector; (8) a method for producing an Ians polypeptide;
XX	(9) an in vitro method of identifying agonists or antagonists of an Ians
XX	pathway to identify candidates for type 1 diabetes drug development; (10)
XX	a method for developing gene therapy for type 1 diabetes; and (11) a
XX	method for identifying a genetic mutation that correlates with type 1
XX	diabetes. GAD65 has antidiabetic activity, and can be used in gene
XX	therapy. The composition and methods of the present invention are useful
XX	in diagnosing, preventing or treating diabetes. The methods may also be
XX	used in screening for agonists or antagonists of Ians pathways to
XX	identify candidate agents for diabetes drug development, or in developing
XX	gene therapy for type 1 diabetes or a related disorder. The present
XX	sequence is used in the exemplification of the present invention.
XX	Sequence 20 BP; 1 A; 9 C; 2 G; 8 T; 0 U; 0 Other;
XX	Query Match 0.3%; Score 15.8; DB 1; Length 20;
XX	Best Local Similarity 89.5%; Pred. No. 7.7e+02;
XX	Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY	572 AGAAGAGAGAGCTGAAGGA 590
QY	
Db	19 AGAAGAGAGAGCTGAAGGA 1

RESULT 576
ADG75970/c

ID	ADG5970	standard; DNA; 20 BP.
AC	ADG75970;	
XX		
XX		
DT	11-MAR-2004	(first entry)
DE	Immunostimulatory non-CpG phosphorochioate DNA oligo IMT189 SeqID72.	
XX		
XX		
XX	ss; non-CpG; immunostimulatory; non-palindromic; immune response;	
KW	proliferation; differentiation; cytokine; antibody production; B-cell;	
KW	plasmacytoid dendritic cell; immunomodulator; gene therapy;	
KW	chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;	
KW	renal cell carcinoma.	
XX		
OS	Synthetic.	
XX		
PN	WO2003101375-A2.	
XX		
PD	11-DEC-2003.	
XX		
PF	30-MAY-2003; 2003WO-EP005691.	
XX		
PR	30-MAY-2002; 2002CA-02388049.	
XX		
PA	(IMMU-) IMMUNOTECH SA.	
XX		
PI	Lopez RA;	
XX		
DR	WPI; 2004-053333/05.	
XX		
PT	New immunostimulatory oligonucleotide comprising non-palindromic nucleic	
PT	acid sequence motif; useful for inducing B-cell activation, treating,	
PT	preventing or ameliorating immune system disorder or tumoral disease e.g.	
PT	melanoma.	
XX		
PS	Example 5; SEQ ID NO 72; 139pp; English.	
XX		
CC	This invention relates to novel immunostimulatory oligonucleotides that	
CC	contain a non-palindromic sequence motif. Specifically, it refers to DNA	
CC	oligonucleotides (without a CpG motif), which can stimulate an immune	
CC	response in animals of the order of primate, including humans. The immune	
CC	response is characterised by the proliferation, differentiation, cytokine	
CC	and antibody production in B-cells, as well as cell differentiation and	
CC	cytokine production in plasmacytoid dendritic cells. The present	
CC	invention describes immunomodulator compositions that also comprise an	
CC	antigen selected from, for example, viruses, bacteria, parasites, tumour	
CC	cells and glycolipids. As such, these DNA oligos can be used in gene	
CC	therapy for inducing B-cell activation, treating, preventing or	
CC	ameliorating an immune system disorder or a tumoral disease including	
CC	chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell	
CC	carcinoma. This oligonucleotide sequence is an immunostimulatory	
CC	phosphorochioate non-CpG variant DNA oligo, used to determine the effect	
CC	of oligo size on B cell proliferation and IL6 secretion in an	
CC	exemplification of the invention.	
XX		
SQ	Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;	
XX		
Query Match	0.3%; Score 15.8; DB 1; Length 20;	
Best Local Similarity	89.5%; Pred. No. 7.7e+02;	
Matches	17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	
QY	5403 AAAAAAAAAATGAAAA 5421	
DB	19 AAAAAAAAACAAAATGAAAA 1	
RESULT 577		
ADH26716/C		
ID	ADH26716 standard; DNA; 20 BP.	
XX		
XX	ADH26716;	
XX		
DT	11-MAR-2004	(first entry)

DE	Human PI3K regulatory subunit 4, p150 DNA antisense oligonucleotide #41.
XX	
XX	Human, phosphoinositide-3-kinase regulatory subunit 4, p150, PI3K;
KW	PI3 kinase; ss; antisense oligonucleotide; phosphorothioate linkage;
KW	2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
KW	hyperproliferative disorder; cancer; Chediak-Higashi syndrome;
KW	neurodegenerative disorder; metabolic disorders; inflammation;
KW	cytotoxic; immunomodulator; neurodegenerative; antimicrobial;
KW	antiinflammatory.
OS	
XX	Homo sapiens.
PN	
XX	US2003225013-A1.
XX	
PD	04-DEC-2003.
XX	
PF	31-MAY-2002; 2002US-00160786.
XX	
PR	31-MAY-2002; 2002US-00160786.
XX	
PA	(ISIS-) ISIS PHARM INC.
XX	
PI	Freier SM, Dobie KW;
XX	
WP	WPI; 2004-051923/05.
XX	
XX	
PT	New antisense oligonucleotides inhibiting the expression of
PT	phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
PT	preventing or treating diseases associated with the subunit, e.g.
PT	hyperproliferative disorders.
XX	
PS	Example 15; SEQ ID NO 51; 62pp; English.
XX	
CC	The invention relates to a compound targeted to a nucleic acid molecule
CC	encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4,
CC	p150. The compound is an antisense oligonucleotide that specifically
CC	hybridizes with a nucleic acid molecule encoding PI3K regulatory subunit
CC	4, p150 and inhibits expression of the polypeptide. The antisense
CC	oligonucleotide comprises at least one modified internucleoside linkage
CC	i.e. a phosphorothioate linkage, at least one modified sugar moiety,
CC	preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified
CC	nucleobase comprising a 5-methylcytosine. The antisense compounds are
CC	useful for modulating the expression of PI3K regulatory subunit 4, p150
CC	and for preventing or treating hyperproliferative disorders (i.e.
CC	cancer), Chediak-Higashi syndrome, neurodegenerative disorders and
CC	metabolic disorders. These may also be used in research and diagnostics
CC	and in preventing or delaying infection or inflammation. This sequence
CC	represents an antisense oligonucleotide of the invention.
XX	
SO	Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
	Query Match 0.3%; Score 15.8; DB 1; Length 20;
	Best Local Similarity 89.5%; Pred. No. 7.7e+02;
	Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0.
OY	376 GGATGCCCTGGGATTATTA 394
DB	20 GGATGCCCTGGGATTATTA 2
RESULT 578	
ADH26784	
ID	ADH26784 standard; DNA; 20 BP.
XX	
AC	ADH26784;
XX	
DT	11-MAR-2004 (first entry)
XX	
DE	Human PI3K regulatory subunit 4, p150 DNA target region #31.
XX	
XX	Human, phosphoinositide-3-kinase regulatory subunit 4, p150, PI3K;
KW	PI3 kinase; ds; antisense oligonucleotide; phosphorothioate linkage;

XX	2'-O-methoxyethyl sugar moiety; 5-methylcytosine;	
KW	hyperproliferative disorder; cancer; Chediak-Higashi syndrome;	
KW	neurodegenerative disorder; metabolic disorders; inflammation;	
KW	cytotoxic; immunomodulator; neurodegenerative; antimicrobial;	
KW	antiinflammatory.	
XX		
OS	Homo sapiens.	
XX		
PN	US2003225013-A1.	
PD	04-DEC-2003.	
XX		
PP	31-MAY-2002; 2002US-00160786.	
XX		
PR	31-MAY-2002; 2002US-00160786.	
XX		
PA	(ISIS-) ISIS PHARM INC.	
XX		
PI	Freier SM, Dobie KW,	
XX		
DR	WPI; 2004-051923/05.	
XX		
PT	New antisense oligonucleotides inhibiting the expression of	
PT	phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for	
PT	preventing or treating diseases associated with the subunit, e.g.	
PT	hyperproliferative disorders.	
XX		
PS	Example 15; SEQ ID NO 119; 62pp; English.	
XX		
CC	The invention relates to a compound targeted to a nucleic acid molecule	
CC	encoding human phosphoinositide-3-kinase (PI3K) regulatory subunit 4,	
CC	p150. The compound is an antisense oligonucleotide that specifically	
CC	hybridizes with a nucleic acid molecule encoding PI3K regulatory subunit	
CC	4, p150 and inhibits expression of the polypeptide. The antisense	
CC	oligonucleotide comprises at least one modified internucleoside linkage	
CC	i.e. a phosphorothioate linkage, at least one modified sugar moiety,	
CC	preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified	
CC	nucleobase comprising a 5-methylcytosine. The antisense compounds are	
CC	useful for modulating the expression of PI3K regulatory subunit 4, p150	
CC	and for preventing or treating hyperproliferative disorders (i.e.	
CC	cancer), Chediak-Higashi syndrome, neurodegenerative disorders and	
CC	metabolic disorders. These may also be used in research and diagnostics	
CC	and in preventing or delaying infection or inflammation. This sequence	
CC	represents a PI3K regulatory subunit 4, p150 DNA antisense	
CC	oligonucleotide target region of the invention.	
XX		
SQ	Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;	
	Query Match	0.3%; Score 15.8; DB 1; Length 20;
	Best Local Similarity	89.5%; Pred. No. 7.7e+02;
	Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	
QY	376 GGTGCGCGGAGTTATTA 394	
DB	1 GGTGCGCGGAGTTATCA 19	
RESULT 579		
ADH65486		
ID	ADH65486 standard; DNA; 20 BP.	
XX		
AC	ADH65486;	
XX		
DT	25-MAR-2004 (first entry)	
XX		
DB	Human glucocorticoid receptor-specific antisense oligonucleotide #2320.	
XX		
KW	antisense oligonucleotide; glucocorticoid receptor; infection;	
KW	inflammation; tumour formation; diabetes; obesity;	
KW	cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;	
KW	phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.	
XX		
OS	Homo sapiens	

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XX WO2003099215-A2.
XX
XX 04-DEC-2003.
XX
XX 20-MAY-2003; 2003WO-US016084.
XX
XX 20-MAY-2002; 2002US-0381857P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Crosby SD, Nalseth AB;
XX
XX WPI; 2004-035034/03.
XX
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
XX mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
XX cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
XX Claim 4; SEQ ID NO 2320; 985bp; English.
XX
XX The invention comprises an antisense oligonucleotides that are targeted
XX to nucleic acids encoding a mammalian glucocorticoid receptor. The
XX antisense oligonucleotides of the invention are useful for preventing or
XX delaying infection, inflammation or tumour formation. The antisense
XX oligonucleotides are also useful for treating diabetes, obesity,
XX cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
XX present DNA sequence represents an antisense oligonucleotide that targets
XX the human glucocorticoid receptor gene. NOTE: The present sequence
XX contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
XX Sequence 20 BP; 3 A; 12 C; 0 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 15.8; DB 1; Length 20;
XX Best Local Similarity 89.5%; Pred. No. 7.7e+02;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 217 CACGACATCTCCCTGACC 235
XX |||||
XX 2 CATCATCATCTCCCTCTCC 20
XX
XX RESULT 580
XX ADH65757/c
XX ID ADH65757 standard; DNA; 20 BP.
XX
XX AC ADH65757;
XX
XX DT 25-MAR-2004 (first entry)
XX
XX DE Human glucocorticoid receptor-specific antisense oligonucleotide #2591.
XX
XX KW antisense oligonucleotide; glucocorticoid receptor; infection;
XX inflammation; tumour formation; diabetes; obesity;
XX cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
XX phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
XX OS Homo sapiens.
XX
XX PN WO2003099215-A2.
XX
XX PD 04-DEC-2003.
XX
XX PF 20-MAY-2003; 2003WO-US016084.
XX
XX PR 20-MAY-2002; 2002US-0381857P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Crosby SD, Nalseth AB;
XX
XX WPI; 2004-035034/03.
XX
XX
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PT New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
XX Claim 4; SEQ ID NO 2591; 985bp; English.
XX
XX The invention comprises an antisense oligonucleotides that are targeted
XX to nucleic acids encoding a mammalian glucocorticoid receptor. The
XX antisense oligonucleotides of the invention are useful for preventing or
XX delaying infection, inflammation or tumour formation. The antisense
XX oligonucleotides are also useful for treating diabetes, obesity,
XX cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
XX present DNA sequence represents an antisense oligonucleotide that targets
XX the human glucocorticoid receptor gene. NOTE: The present sequence
XX contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
XX Sequence 20 BP; 2 A; 11 C; 0 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 15.8; DB 1; Length 20;
XX Best Local Similarity 89.5%; Pred. No. 7.7e+02;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 2564 AGGGGAGAGAGATGGA 2582
XX |||||
XX 19 AGGGGAGAGAGATGGA 1
XX
XX RESULT 581
XX ADH65756/c
XX ID ADH65756 standard; DNA; 20 BP.
XX
XX AC ADH65756;
XX
XX DT 25-MAR-2004 (first entry)
XX
XX DE Human glucocorticoid receptor-specific antisense oligonucleotide #3590.
XX
XX KW antisense oligonucleotide; glucocorticoid receptor; infection;
XX inflammation; tumour formation; diabetes; obesity;
XX cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
XX phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
XX OS Homo sapiens.
XX
XX PN WO2003099215-A2.
XX
XX PD 04-DEC-2003.
XX
XX PF 20-MAY-2003; 2003WO-US016084.
XX
XX PR 20-MAY-2002; 2002US-0381857P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Crosby SD, Nalseth AB;
XX
XX WPI; 2004-035034/03.
XX
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
XX mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
XX cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
XX Claim 4; SEQ ID NO 3590; 985bp; English.
XX
XX The invention comprises an antisense oligonucleotides that are targeted
XX to nucleic acids encoding a mammalian glucocorticoid receptor. The
XX antisense oligonucleotides of the invention are useful for preventing or
XX delaying infection, inflammation or tumour formation. The antisense
XX oligonucleotides are also useful for treating diabetes, obesity,
XX cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
XX present DNA sequence represents an antisense oligonucleotide that targets
XX the human glucocorticoid receptor gene. NOTE: The present sequence
XX contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
```

XX Sequence 20 BP; 1 A; 11 C; 1 G; 7 T; 0 U; 0 Other;
 SQ Query Match 0.3%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2566 GGGGAGGAGAGATGGAGA 2584
 DB 20 GGGAGAGGGAGATGGAGA 2

RESULT 582
 ADH67178
 ID ADH67178 standard; DNA; 20 BP.
 AC ADH67178;
 XX
 XX 25-MAR-2004 (first entry)
 DT
 XX Human glucocorticoid receptor-specific antisense oligonucleotide #4012.
 DE
 XX antisense oligonucleotide; glucocorticoid receptor; infection;
 KW inflammation; tumour formation; diabetes; obesity;
 KM cardiovascular disorder; hyperlipidemia; Cushing's syndrome; human; ss;
 XX phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
 OS Homo sapiens.
 XX
 XX W02003099215-A2.
 PN
 XX
 XX 04-DEC-2003.
 PD
 XX
 XX 20-MAY-2003; 2003WO-US016084.
 PF
 XX 20-MAY-2002; 2002US-0381857P.
 PR
 XX
 XX (PHMA) PHARMACIA CORP.
 PA
 XX Crosby SD, Nalabeth AE;
 PI
 XX WPI; 2004-035034/03.
 DR
 XX
 XX New antisense compound targeted to a nucleic acid molecule encoding
 PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
 PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
 PT
 XX
 PS Claim 4; SEQ ID NO 4012; 985pp; English.
 PS
 XX The invention comprises an antisense oligonucleotide that are targeted
 CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
 CC antisense oligonucleotides of the invention are useful for preventing or
 CC delaying infection, inflammation or tumour formation. The antisense
 CC oligonucleotides are also useful for treating diabetes, obesity,
 CC cardiovascular disorders, hyperlipidemia or Cushing's syndrome. The
 CC present DNA sequence represents an antisense oligonucleotide that targets
 CC the human glucocorticoid receptor gene. NOTE: The present sequence
 CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
 CC
 XX Sequence 20 BP; 3 A; 11 C; 0 G; 6 T; 0 U; 0 Other;
 SQ Query Match 0.3%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 217 CACCACATCTCCCTCACC 235
 DB 1 CACACATCTCCCTCTCC 19

RESULT 583
 ADJ46820/c
 ID ADJ46820 standard; DNA; 20 BP.

XX
 XX ADJ46820;
 AC
 XX 06-MAY-2004 (first entry)
 DT
 XX Human KIAA1531 target sequence ISIS #125803.
 DE
 XX human; KIAA1531, hyperproliferative disorder; cancer;
 KW angiogenesis hyperactivation; chronic inflammation; ss.
 XX
 XX Homo sapiens.
 OS
 XX US2004023378-A1.
 PN
 XX 05-FEB-2004.
 PD
 XX 31-JUL-2002; 2002US-00210290.
 PF
 XX 31-JUL-2002; 2002US-00210290.
 PR
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Chiang M, Marcusson EG, Dobie KW;
 PI
 XX WPI; 2004-142659/14.
 DR
 XX
 XX New compound, particularly an antisense oligonucleotide targeted to a
 PT nucleic acid encoding KIAA1531, useful for treating cancer, chronic
 PT inflammation or conditions involving hyperactivation of angiogenesis.
 PT
 XX Example 15; SEQ ID NO 97; 65pp; English.
 PS
 XX The invention relates to a compound targeted to and which specifically
 CC hybridizes with a nucleic acid molecule encoding KIAA1531 and inhibits
 CC the expression of KIAA1531. The compound, composition and methods are
 CC useful for treating a disease or condition associated with KIAA1531, such
 CC as a hyperproliferative disorder, e.g. cancer, a disease or condition
 CC involving hyperactivation of angiogenesis, or chronic inflammation. They
 CC are also useful in research and diagnostics for modulating the expression
 CC of KIAA1531. The present sequence represents a human KIAA1531 target
 CC sequence.
 CC
 XX Sequence 20 BP; 6 A; 1 C; 9 G; 4 T; 0 U; 0 Other;
 SQ Query Match 0.3%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2318 CCATCATCTCCACCTCTT 2336
 DB 19 CCACGATCTCCACCTCTT 1

RESULT 584
 ADJ46745
 ID ADJ46745 standard; DNA; 20 BP.
 AC ADJ46745;
 XX
 XX 06-MAY-2004 (first entry)
 DT
 XX Human KIAA1531 antisense oligonucleotide ISIS #208169.
 DE
 XX human; KIAA1531, hyperproliferative disorder; cancer;
 KW angiogenesis hyperactivation; chronic inflammation; ss; antisense.
 XX
 XX Homo sapiens.
 OS
 XX US2004023378-A1.
 PN
 XX 05-FEB-2004.
 PD
 XX

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PF 31-JUL-2002; 2002US-00210290.
XX
XX 31-JUL-2002; 2002US-00210290.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Chiang M, Marcusson EG, Dobie KM;
XX
XX WPI; 2004-142659/14.
XX
XX
XX New compound, particularly an antisense oligonucleotide targeted to a
XX nucleic acid encoding KIAA1531, useful for treating cancer, chronic
XX inflammation or conditions involving hyperactivation of angiogenesis.
XX
XX Example 15; SEQ ID NO 22; 65pp; English.
XX
XX The invention relates to a compound targeted to and which specifically
XX hybridizes with a nucleic acid molecule encoding KIAA1531 and inhibits
XX the expression of KIAA1531. The compound, composition and methods are
XX useful for treating a disease or condition associated with KIAA1531, such
XX as a hyperproliferative disorder, e.g. cancer, a disease or condition
XX involving hyperactivation of angiogenesis, or chronic inflammation. They
XX are also useful in research and diagnostics for modulating the expression
XX of KIAA1531. The present sequence represents a human KIAA1531 antisense
XX oligonucleotide.
XX
SQ Sequence 20 BP; 4 A; 9 C; 1 G; 6 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2318 CCATCATCTCCACCTTCTT 2336
DB 2 CCAAGATCTCCACCTTCTT 20
RESULT 585
ADJ60851
ID ADJ60851 standard; DNA; 20 BP.
XX
XX ADJ60851;
XX
XX 06-MAY-2004 (first entry)
XX
XX Oligonucleotide associated to PDB4A #134.
XX
XX interleukin, IL-4 receptor; IL-5 receptor; lung disease;
XX airway inflammation; allergy; asthma; impeded respiration;
XX cystic fibrosis; acute respiratory distress syndrome;
XX pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
XX ss.
XX
XX Homo sapiens.
XX
XX WO2004011613-A2.
XX
XX 05-FEB-2004.
XX
XX 25-JUL-2003; 2003WO-US023509.
XX
XX 29-JUL-2002; 2002US-0399076P.
XX
XX (EPIC-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;
XX Shahabuddin S, Lu H, Cong H;
XX
XX WPI; 2004-203534/19.
XX
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
XX initiation codons and introns of respiratory disease-relevant genes e.g.,
XX CCRL, RANTBS, MCP4, useful for prophylaxis or treating respiratory

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PT disease e.g., asthma.
XX
XX Claim 2; SEQ ID NO 1707; 85pp; English.
XX
XX The present invention relates to an oligonucleotide anti-sense to e.g.,
XX initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
XX end of nucleic acid target comprising gene(s) chosen from e.g.
XX interleukin (IL)-4 receptor, IL-5 receptor or salts of the
XX oligonucleotide and optionally surfactant operatively linked to the
XX oligonucleotide. The method is useful for preventing or treating a
XX respiratory or lung disease, which involves administering to the airways
XX of a subject an effective amount of an inhibitor. The oligonucleotide is
XX useful for production of a medicament for the prevention and/or treatment
XX of a respiratory or lung disease. The respiratory or lung disease is
XX chosen from airway inflammation, allergy(ies), asthma, impeded
XX respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
XX (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
XX (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
XX obstruction. The present sequence represents an oligonucleotide of the
XX invention.
XX
SQ Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 3215 GACTGCAGCTGCTCAGCTG 3233
DB 1 GACTGCAGCAGCTCAGCTG 19
RESULT 586
ADJ18373/C
ID ADJ18373 standard; DNA; 20 BP.
XX
XX ADJ18373;
XX
XX 20-MAY-2004 (first entry)
XX
XX Antisense DNA oligo used to modulate human LRH1 expression SeqID 2923.
XX
XX human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
XX phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
XX low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
XX gall stone; triglyceridaemia; obesity; hepatitis;
XX hepatocellular carcinoma; aromatase; cytotaxic; antilipemic;
XX antiarteriosclerotic; anorectic; hepatotropic; litholytic;
XX antiinflammatory; virucidal.
XX
XX Homo sapiens.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= b
XX /mod_base= OTHER
XX /label= OTHER= phosphorothioate backbone
XX modified_base 1..5
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
XX cytidine nucleobases are 5-methylcytidine."
XX 16..20
XX /tag= c
XX /mod_base= OTHER
XX /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
XX cytidine nucleobases are 5-methylcytidine."
XX
XX WO2004003201-A2.
XX
XX 08-JAN-2004.
XX

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PF 01-JUL-2003; 2003WO-US020865.
 XX
 PR 01-JUL-2002; 2002US-0392813P.
 XX
 PA (PHAA) PHARMACIA CORP.
 XX
 PI Kane CD;
 XX WPI, 2004-083058/08.
 DR
 PT New antisense oligonucleotides targeted to a nucleic acid encoding liver
 PT related homologue-1 (LRH1), useful for treating breast cancer,
 PT dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
 XX
 PS Example 15; SEQ ID NO 2923; 909pp; English.
 XX
 CC This invention relates to novel antisense compounds useful for modulating
 CC the expression of liver related homologue-1 (LRH1) and splice variants
 CC thereof. Specifically, it refers to compositions 8-30 nucleobases in
 CC length that target a portion of an active site on the nucleic acid
 CC molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
 CC nuclear receptor protein that functions as a tissue specific
 CC transcription factor. The present invention describes antisense
 CC oligonucleotides that comprise at least one modified internucleoside
 CC linkage, a phosphorothioate linkage; at least one modified sugar moiety,
 CC a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
 CC methylcytidine. These antisense compounds are useful for treating or
 CC diagnosing a disease associated with LRH1, such as breast cancer,
 CC dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
 CC LDL (low density lipoprotein), hypercholesterolemia, gall stones,
 CC triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
 CC hepatitis, as well as hepatocellular carcinoma or a condition associated
 CC with aromatase activity. Accordingly, these compositions exhibit
 CC cytostatic, antiinflammatory, antiarteriosclerotic, anorectic, hepatotropic,
 CC litholytic, antiinflammatory and virucidal activities. This
 CC oligonucleotide sequence is an antisense DNA oligo used to modulate the
 CC expression of the human LRH1 protein of the invention.
 XX
 SO Sequence 20 BP; 7 A; 3 C; 3 G; 7 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1607 AGCATGCTTCTACTTCAG 1625
 DB 20 AGATGCTTCTACTTCAG 2
 RESULT 587
 ADJ18838/c
 ID ADJ18838 standard; DNA; 20 BP.
 XX
 AC ADJ18838;
 XX
 DT 20-MAY-2004 (first entry)
 XX
 DE Antisense DNA oligo used to modulate human LRH1 expression SeqID 3388.
 XX
 KM human; 88; liver related homologue-1; LRH1; NR5A2; antisense;
 KM phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
 KM low HDL; high density lipoprotein; high LDL; hypercholesterolemia;
 KM gall stone; triglyceridaemia; obesity; hepatitis; hepatitis;
 KM hepatocellular carcinoma; aromatase; cytostatic; antiinflammatory;
 KM antiarteriosclerotic; anorectic; hepatotropic; litholytic;
 KM antiinflammatory; virucidal.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= b

FT /mod_base= OTHER
 FT /label= OTHER= phosphorothioate backbone
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
 FT cytidine nucleobases are 5-methylcytidine."
 FT 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
 FT cytidine nucleobases are 5-methylcytidine."
 XX
 PN WO2004003201-A2.
 PD
 PD 08-JAN-2004.
 XX
 XX 01-JUL-2003; 2003WO-US020865.
 XX
 XX 01-JUL-2002; 2002US-0392813P.
 XX
 PA (PHAA) PHARMACIA CORP.
 XX
 PI Kane CD;
 XX WPI, 2004-083058/08.
 DR
 PT New antisense oligonucleotides targeted to a nucleic acid encoding liver
 PT related homologue-1 (LRH1), useful for treating breast cancer,
 PT dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
 XX
 PS Example 15; SEQ ID NO 3388; 909pp; English.
 XX
 CC This invention relates to novel antisense compounds useful for modulating
 CC the expression of liver related homologue-1 (LRH1) and splice variants
 CC thereof. Specifically, it refers to compositions 8-30 nucleobases in
 CC length that target a portion of an active site on the nucleic acid
 CC molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
 CC nuclear receptor protein that functions as a tissue specific
 CC transcription factor. The present invention describes antisense
 CC oligonucleotides that comprise at least one modified internucleoside
 CC linkage, a phosphorothioate linkage; at least one modified sugar moiety,
 CC a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
 CC methylcytidine. These antisense compounds are useful for treating or
 CC diagnosing a disease associated with LRH1, such as breast cancer,
 CC dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
 CC LDL (low density lipoprotein), hypercholesterolemia, gall stones,
 CC triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
 CC hepatitis, as well as hepatocellular carcinoma or a condition associated
 CC with aromatase activity. Accordingly, these compositions exhibit
 CC cytostatic, antiinflammatory, antiarteriosclerotic, anorectic, hepatotropic,
 CC litholytic, antiinflammatory and virucidal activities. This
 CC oligonucleotide sequence is an antisense DNA oligo used to modulate the
 CC expression of the human LRH1 protein of the invention.
 XX
 SO Sequence 20 BP; 7 A; 3 C; 3 G; 7 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 7.7e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1607 AGCATGCTTCTACTTCAG 1625
 DB 19 AGATGCTTCTACTTCAG 1
 RESULT 588
 ADK74191/c
 ID ADK74191 standard; DNA; 20 BP.
 XX
 AC ADK74191;
 XX
 DT 20-MAY-2004 (first entry)

```
XX DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1525.
XX XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KM diabetic neuropathy; arthritic pain; migraine headache;
KM infantile epilepsy; ataxia; ss.
XX OS Synthetic.
XX PN WO2004016754-A2.
XX PD 26-FEB-2004.
XX PF 14-AUG-2003; 2003WO-US025465.
XX PR 14-AUG-2002; 2002US-0403416P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI Roberds SL;
XX DR WPI, 2004-203785/19.
XX PT New antisense compound targeted to a nucleic acid molecule encoding
XX Nav1.3, useful for useful for treating a disease or condition associated
XX PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
XX disorder, or ataxia.
XX PS Claim 4; SEQ ID NO 1525; 417bp; English.
XX CC The present invention relates to an antisense compound targeted to a
XX CC nucleic acid molecule encoding Nav1.3, where the antisense compound
XX CC specifically hybridizes with and inhibits the expression of Nav1.3. The
XX CC compound and composition are useful for treating a disease or condition
XX CC associated with Nav1.3, e.g. pain including but not limited to
XX CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
XX CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
XX CC pain from burns, migraine headache, cluster headache, mild-to-moderate
XX CC headache; seizure disorder such as childhood seizure disorder, including
XX CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
XX CC sequence represents a chimeric phosphorothioate oligonucleotide with
XX CC 2'MOR wings and a decoy gap. Used during the antisense inhibition of
XX CC human Nav1.3 expression, the oligonucleotides are designed to target
XX CC different regions of the human Nav1.3 RNA.
XX SQ Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 15.8; DB 1; Length 20;
XX Best Local Similarity 89.5%; Pred. No. 7.7e+02;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 1676 GAAAAGATGGACAGCCAC 1694
DB 19 GAAAAGATGGACAGCCAC 1
XX
RESULT 589
ADK80791
ID ADK80791 standard; DNA; 20 BP.
XX AC ADK80791;
XX XX
XX DT 20-MAY-2004 (first entry)
XX XX
XX DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #8125.
XX XX
XX KM Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
XX KM diabetic neuropathy; arthritic pain; migraine headache;
XX KM infantile epilepsy; ataxia; ss.
XX OS Synthetic.
XX PN WO2004016754-A2.
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XX PD 26-FEB-2004.
XX PF 14-AUG-2003; 2003WO-US025465.
XX PR 14-AUG-2002; 2002US-0403416P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI Roberds SL;
XX DR WPI, 2004-203785/19.
XX PT New antisense compound targeted to a nucleic acid molecule encoding
XX PT Nav1.3, useful for useful for treating a disease or condition associated
XX PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
XX disorder, or ataxia.
XX PS Claim 4; SEQ ID NO 8125; 417bp; English.
XX CC The present invention relates to an antisense compound targeted to a
XX CC nucleic acid molecule encoding Nav1.3, where the antisense compound
XX CC specifically hybridizes with and inhibits the expression of Nav1.3. The
XX CC compound and composition are useful for treating a disease or condition
XX CC associated with Nav1.3, e.g. pain including but not limited to
XX CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
XX CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
XX CC pain from burns, migraine headache, cluster headache, mild-to-moderate
XX CC headache; seizure disorder such as childhood seizure disorder, including
XX CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
XX CC sequence represents a chimeric phosphorothioate oligonucleotide with
XX CC 2'MOR wings and a decoy gap. Used during the antisense inhibition of
XX CC human Nav1.3 expression, the oligonucleotides are designed to target
XX CC different regions of the human Nav1.3 RNA.
XX SQ Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 15.8; DB 1; Length 20;
XX Best Local Similarity 89.5%; Pred. No. 7.7e+02;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 1349 AAAAATTACACAGCTGCT 1367
DB 2 AAAAATTACAAAGCTGCT 20
XX
RESULT 590
ADK75025/C
ID ADK75025 standard; DNA; 20 BP.
XX AC ADK75025;
XX XX
XX DT 20-MAY-2004 (first entry)
XX XX
XX DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #2359.
XX XX
XX KM Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
XX KM diabetic neuropathy; arthritic pain; migraine headache;
XX KM infantile epilepsy; ataxia; ss.
XX OS Synthetic.
XX PN WO2004016754-A2.
XX PD 26-FEB-2004.
XX PF 14-AUG-2003; 2003WO-US025465.
XX PR 14-AUG-2002; 2002US-0403416P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI Roberds SL;
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XX WPI, 2004-203785/19.
DR
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
PS Claim 4; SEQ ID NO 2359; 417bp; English.
XX
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2' MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
SQ Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1677 AAAAGATGGACAGCACT 1695
DB 20 AAAAGATGGACAGCACT 2
RESULT 591
ADK80516
ID ADK80516 standard; DNA; 20 BP.
XX
XX ADK80516;
XX
XX 20-MAY-2004 (first entry)
DT
XX
XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #7850.
DE
XX
XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
XX diabetic neuropathy; arthritic pain; migraine headache;
XX infantile epilepsy; ataxia; ss.
XX
XX Synthetic.
OS
XX
XX WO2004016754-A2.
XX
XX 26-FEB-2004.
PD
XX
XX 14-AUG-2003; 2003MO-US025465.
PF
XX
XX 14-AUG-2002; 2002US-0403416P.
PR
XX
XX (PHAA ) PHARMACIA CORP.
PA
XX
XX Roberds SL;
PI
XX
XX WPI, 2004-203785/19.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
PS Claim 4; SEQ ID NO 7850; 417bp; English.
XX

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CC The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2' MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
SQ Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1349 AAAATTTCACACAGCTGCT 1367
DB 1 AAAAGTTCAAGAGCTGCT 19
RESULT 592
ADL34605/C
ID ADL34605 standard; DNA; 20 BP.
XX
XX ADL34605;
XX
XX 17-JUN-2004 (first entry)
DT
XX
XX ISIS antisense oligonucleotide ISIS 206997.
DE
XX
XX antisense; inhibitor; hybridisation; human; phosphoinositide-3-kinase;
XX regulatory subunit 4; p150; internucleoside linkage;
XX phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine;
XX infection; inflammation; tumour formation; hyperproliferative disorder;
XX cancer; Chediak-Higashi syndrome; metabolic disorder; immunomodulator;
XX cytoskeletal; gene therapy; ss; primer.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
XX /note= "phosphorothioate backbone"
XX
XX US2004063657-A1.
XX
XX 01-APR-2004.
PD
XX
XX 18-SEP-2003; 2003US-00667022.
PF
XX
XX 31-MAY-2002; 2002US-00160786.
PR
XX
XX (FRIE/) FRIER S M.
PA (DOBI/) DOBIE K W.
XX
XX Freier SM, Dobie KW;
PI
XX
XX WPI, 2004-282523/26.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for
PT treating cancer, Chediak-Higashi syndrome or a metabolic disorder.
XX
PS Example 15; SEQ ID NO 51; 60bp; English.
XX
XX This invention describes a novel antisense oligonucleotides which
CC

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	CC	specificity; hybridisation; to and inhibits the expression of human
	CC	phosphoinositide-3-kinase, regulatory subunit 4, p150. The
	CC	oligonucleotides comprises at least one modified internucleoside linkage,
	CC	preferably a phosphorothioate linkage. It also comprises at least one
	CC	modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The
	CC	nuclease oligonucleotide further comprises at least one modified
	CC	nuclease, preferably a 5-methylcytosine. The antisense oligonucleotide
	CC	can be used in diagnostics and as research reagents and kits. It can also
	CC	be used prophylactically, e.g. to prevent or delay infection.
	CC	Inflammation or tumour formation. It can also be used to treat a disease
	CC	or condition associated with phosphoinositide-3-kinase, regulatory
	CC	subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer,
	CC	Cheidiak-Higashi syndrome or a metabolic disorder. The products of the
	CC	invention are immunomodulators with cytostatic activity and can be used
	CC	for gene therapy.
	XX	
SQ		Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
OY		
Dy	Query Match	0.3%; Score 15.8; DB 1; Length 20;
	Best Local Similarity	89.5%; Pred.No. 7.7e+02;
Dd	Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	
	376 GGTCCTCGGGATTATTA 394 20 GTGCCGCGGAATTATCA 2	
RESULT 593		
ID	ADL34673	ADL34673 standard; DNA; 20 BP.
AC	ADI34673;	
DX	17-JUN-2004	(first entry)
DE	Phosphoinositide-3-kinase regulatory subunit 4 p150 fragment 124633.	
KW	antisense; inhibitor; hybridization; human; phosphoinositide-3-kinase;	
KM	regulatory subunit 4; p150; internucleoside linkage;	
KV	phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine;	
KX	infection; inflammation; tumor formation; hyperproliferative disorder;	
KW	cancer; Cheidiak-Higashi syndrome; metabolic disorder; immunomodulator;	
KV	cytostatic; gene therapy; ds.	
XK	Homo sapiens.	
OS	US2004063657-A1.	
PN	01-APR-2004.	
PD	18-SEP-2003; 2003US-00667022.	
PP	31-MAY-2002; 2002US-00160786.	
PR		
PA	(FREIER) FREIER S M.	
PA	((DOBI)) DOBIE K W.	
PI	Freier SM, Dobie KW;	
PJ	WI: 2004-282523/26.	
DR	New antisense compound targeted to a nucleic acid molecule encoding	
PT	phosphoinositide-3-kinase, regulatory subunit 4, p150, useful for	
PF	treating cancer, Chediak-Higashi syndrome or a metabolic disorder.	
PS	Example 15; SEQ ID NO 119; 60pp; English.	
XX	This invention describes a novel antisense oligonucleotides which	
CC	specifically hybridises to and inhibits the expression of human	
CC	phosphoinositide-3-kinase, regulatory subunit 4, p150. The	
CC	oligonucleotides comprises at least one modified internucleoside linkage,	
CC	preferably a phosphorothioate linkage. It also comprises at least one	
CC	modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety. The	
CC	nuclease oligonucleotide further comprises at least one modified	
CC	nuclease, preferably a 5-methylcytosine. The antisense oligonucleotide	
CC	can be used in diagnostics and as research reagents and kits. It can also	
CC	be used prophylactically, e.g. to prevent or delay infection.	
CC	Inflammation or tumour formation. It can also be used to treat a disease	
CC	or condition associated with phosphoinositide-3-kinase, regulatory	
CC	subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer,	
CC	Cheidiak-Higashi syndrome or a metabolic disorder. The products of the	
CC	invention are immunomodulators with cytostatic activity and can be used	
CC	for gene therapy.	
XX		

CC	antisense oligonucleotide further comprises at least one modified
CC	nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotide
CC	can be used in diagnostics and as research reagents and kits. It can also
CC	be used prophylactically, e.g. to prevent or delay infection,
CC	inflammation or tumour formation. It can also be used to treat a disease
CC	or condition associated with phosphoinositide-3-kinase, regulatory
CC	subunit 4, p150, e.g. hyperproliferative disorder, preferably cancer,
CC	Chediak-Higashi syndrome or a metabolic disorder. The products of the
CC	invention are immunomodulators with cytostatic activity and can be used
CC	for gene therapy.
SQ	Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
Dy	376 GGAGCCCTGGGATTATTA 394
Dd	1 GGAGCCCTGGGATTATCA 19
RESULT 594	
ID	ADO46340 standard; DNA; 20 BP.
AC	ADO46340;
XX	15-JUL-2004 (first entry)
DE	Human oligonucleotide #1706.
XX	Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
KW	CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
KW	tryptase b; PDB4 A; PDB4 B; PDB4 C; PDB4 D; respiratory disease;
KW	lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
KW	asthma; lung allergy; inflammation; inflammatory disease;
KW	airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
KW	chronic obstructive pulmonary disease; COPD; allergic rhinitis;
KW	acute respiratory distress syndrome; pulmonary hypertension;
KW	lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX	Homo sapiens.
OS	
XX	US2004049022-A1.
PN	
XX	11-MAR-2004.
PD	
XX	25-JUL-2003; 2003US-00627930.
PF	
PR	23-APR-2002; 2002WO-US011135.
XX	23-APR-2002; 2002WO-US011143.
PA	(NYCE/) NYCE J W.
PA	(SAND/) SANDRASAGRA A.
PA	(TANG/) TANG L.
PA	(AGUI/) AGUILAR D.
PA	(MILL/) MILLER S.
PA	(SHAH/) SHAHABUDDIN S.
PA	(LUHH/) LU H.
PA	(CONG/) CONG H.
PB	
PI	Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
PI	Shahabuddin S, Lu H, Cong H;
PT	WPJ; 2004-293804/27.
XX	
XX	Novel single or multiple target oligonucleotide anti-sense to e.g.
PT	initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
PT	RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
XX	asthma.
PS	Claim 2; SEQ ID NO 1707; 174pp; English.

XX The invention relates to oligonucleotides anti-sense to an initiation
CC codon, coding region, 5' or 3' intron-exon junction, intron or region
CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
CC -5 receptor, CCR1, CCR3, Botaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
CC triptase a, triptase b, PDB4 A, PDB4 B, PDB4 C or PDB4 D. The invention
CC also relates to a method of screening a candidate compound that binds to
CC one or more nucleic acid target(s) or expressed product(s), for the
CC prevention and/or treatment of a respiratory or lung disease. The
CC oligonucleotides are useful for reducing or inhibiting expression of a
CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
CC CCR1, CCR3, Botaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, triptase a,
CC triptase b, PDB4 A, PDB4 B, PDB4 C, or PDB4 D. The oligonucleotides are
CC useful for preventing or treating a respiratory or lung disease. The
CC respiratory or lung disease is associated with hyper-responsiveness to
CC and/or increased levels of, adenosine and/or levels of adenosine A
CC receptor(s), and/or asthma and/or lung allergies associated with
CC inflammation or an inflammatory disease. The respiratory or lung disease
CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
CC hypertension, lung inflammation, bronchitis, airway obstruction or
CC bronchoconstriction. This sequence represents an oligonucleotide of the
CC invention.

XX
SQ Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3215 GACTGCAGCTGTCAGCTG 3233
DB 1 GACTGCAGCTGTCAGCTG 19

RESULT 595
ADO31986/C
ID ADO31986 standard; DNA; 20 BP.
XX
AC ADO31986;
XX
DT 29-JUL-2004 (first entry)
XX
DE Cyclin-dependent kinase 6, antisense oligonucleotide #83.
XX
KM antisense therapy; cyclin-dependent kinase 6;
XX hyperproliferative disorder; cancer; bacterial infection;
XX viral infection; apoptosis; ss; probe; human.
XX
OS Homo sapiens.
XX
PN US2004087523-A1.
XX
PD 06-MAY-2004.
XX
PF 31-JUL-2002; 2002US-00210802.
XX
PR 31-JUL-2002; 2002US-00210802.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Doble KW,
XX
XX WPI; 2004-356241/33.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding cyclin-dependent kinase 6, useful for treating
PT cancer, bacterial/viral infection or conditions involving aberrant
PT apoptosis.
XX
PS Disclosure; SEQ ID NO 97; 68pp; English.

XX The invention relates to antisense oligonucleotides targeted to cyclin-
CC dependent kinase 6, and which inhibit the expression of cyclin-dependent
CC kinase 6. The antisense oligonucleotides are useful for treating a
CC disease or condition associated with cyclin-dependent kinase 6, such as a
CC hyperproliferative disorder (e.g. cancer), or conditions arising from
CC bacterial or viral infections, or involving aberrant apoptosis. They are
CC also useful in research and diagnostics for modulating the expression of
CC cyclin-dependent kinase 6. The present sequence represents a cyclin-
CC dependent kinase 6 antisense oligonucleotide. Note: Seqid 15-134 are also
CC used in Tables 1 and 2 (page 30-34) but these sequences do not match
CC seqid 15-134 of the seq 11st.

XX
SQ Sequence 20 BP; 6 A; 1 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2318 CCATCATCTCCACCTTCTT 2336
DB 19 CCATCATCTCCACCTTCTT 1

RESULT 596
ADO31911
ID ADO31911 standard; DNA; 20 BP.
XX
AC ADO31911;
XX
DT 29-JUL-2004 (first entry)
XX
DE Cyclin-dependent kinase 6, antisense oligonucleotide #8.
XX
KM antisense therapy; cyclin-dependent kinase 6;
XX hyperproliferative disorder; cancer; bacterial infection;
XX viral infection; apoptosis; ss; probe; human.
XX
OS Homo sapiens.
XX
PN US2004087523-A1.
XX
PD 06-MAY-2004.
XX
PF 31-JUL-2002; 2002US-00210802.
XX
PR 31-JUL-2002; 2002US-00210802.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Doble KW,
XX
XX WPI; 2004-356241/33.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding cyclin-dependent kinase 6, useful for treating
PT cancer, bacterial/viral infection or conditions involving aberrant
PT apoptosis.
XX
PS Disclosure; SEQ ID NO 22; 68pp; English.

XX The invention relates to antisense oligonucleotides targeted to cyclin-
CC dependent kinase 6, and which inhibit the expression of cyclin-dependent
CC kinase 6. The antisense oligonucleotides are useful for treating a
CC disease or condition associated with cyclin-dependent kinase 6, such as a
CC hyperproliferative disorder (e.g. cancer), or conditions arising from
CC bacterial or viral infections, or involving aberrant apoptosis. They are
CC also useful in research and diagnostics for modulating the expression of
CC cyclin-dependent kinase 6. The present sequence represents a cyclin-
CC dependent kinase 6 antisense oligonucleotide. Note: Seqid 15-134 are also
CC used in Tables 1 and 2 (page 30-34) but these sequences do not match
CC seqid 15-134 of the seq 11st.

```
SQ Sequence 20 BP; 4 A; 9 C; 1 G; 6 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2318 CCATCATCTCCACCTTCTT 2336
DB 2 CCACGATCTCCACCTTCTT 20

RESULT 597
ADN94856
ID ADN94856 standard; DNA; 20 BP.
XX
AC ADN94856;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human nidogen antisense oligonucleotide #49.
XX
KM human; Antisense Therapy; Gene Therapy; nidogen;
KW Chediak-Higashi syndrome; ss; probe.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= Other
FT /note= "Phosphorothioate backbone. All cytidines are 5-
FT modified_base 1..5
FT /tag= a
FT /mod_base= Other
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /tag= c
FT /mod_base= Other
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN US2004097451-A1.
XX
PD 20-MAY-2004.
XX
PF 19-NOV-2002; 2002US-00300611.
XX
PR 19-NOV-2002; 2002US-00300611.
XX
PA (ISIS-) ISIS PHARM INC.
PI Chiang M, Dobie KW;
XX
DR WPI; 2004-389192/36.
XX
PT New compounds, particularly oligonucleotides targeted to a nucleic acid
PT encoding nidogen, useful for treating diseases associated with nidogen,
PT e.g. Chediak-Higashi syndrome.
XX
PS Example 15; SEQ ID NO 61; 91pp; English.
XX
CC The invention relates to antisense oligonucleotides which are targeted
CC to, and inhibit the expression of, a nucleic acid molecule encoding
CC nidogen. The antisense oligonucleotides are useful for treating a disease
CC or condition associated with nidogen, such as Chediak-Higashi syndrome.
CC They are also useful in research and diagnostics for modulating the
CC expression of nidogen. The present sequence represents a human nidogen
CC antisense oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 2 A; 8 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;
```

```
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 3276 TAGTGCCAGCCCCAGCCTG 3294
DB 1 TGGTGCCAGCCCCATCTG 19

RESULT 598
ADN94920/c
ID ADN94920 standard; DNA; 20 BP.
XX
AC ADN94920;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human nidogen antisense oligonucleotide #113.
XX
KM human; Antisense Therapy; Gene Therapy; nidogen;
KW Chediak-Higashi syndrome; ss; probe.
XX
OS Homo sapiens.
XX
PN US2004097451-A1.
XX
PD 20-MAY-2004.
XX
PF 19-NOV-2002; 2002US-00300611.
XX
PR 19-NOV-2002; 2002US-00300611.
XX
PA (ISIS-) ISIS PHARM INC.
PI Chiang M, Dobie KW;
XX
DR WPI; 2004-389192/36.
XX
PT New compounds, particularly oligonucleotides targeted to a nucleic acid
PT encoding nidogen, useful for treating diseases associated with nidogen,
PT e.g. Chediak-Higashi syndrome.
XX
PS Example 15; SEQ ID NO 125; 91pp; English.
XX
CC The invention relates to antisense oligonucleotides which are targeted
CC to, and inhibit the expression of, a nucleic acid molecule encoding
CC nidogen. The antisense oligonucleotides are useful for treating a disease
CC or condition associated with nidogen, such as Chediak-Higashi syndrome.
CC They are also useful in research and diagnostics for modulating the
CC expression of nidogen. The present sequence represents a human nidogen
CC antisense oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 5 A; 5 C; 8 G; 2 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 7.7e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 3276 TAGTGCCAGCCCCAGCCTG 3294
DB 20 TGGTGCCAGCCCCATCTG 2

RESULT 599
ADP20520/c
ID ADP20520 standard; DNA; 20 BP.
XX
AC ADP20520;
XX
DT 26-AUG-2004 (first entry)
XX
DE Transcription factor AP-2 antisense oligonucleotide seq'd 67.
XX
KW cytosstatic; AP-2-inhibitor-Alpha; AP-2 alpha; AP-2 alpha modulator;
KW AP-2 alpha associated disorder; hyperproliferative disorder; human;
```

KW		transcription factor; antisense oligonucleotide; antisense technology;
XV	ss.	
XX	Homo sapiens.	
OS		
PV	US2004109848-A1.	
XX		
PD	10-JUN-2004.	
XX		
FJ	09-DEC-2002; 2002US-00315962.	
PR	09-DEC-2002; 2002US-00315962.	
XX	(ISIS-) ISIS PHARM INC.	
PA	Bennett CF, Dean NM, Freier SM, Doble KW;	
EI	WPt; 2004-440306/A1.	
DR		
PT	New compounds targeted to nucleic acid molecules encoding AP-2 alpha and inhibits the expression of AP-2 alpha, useful for treating AP-2 alpha-associated disease or condition, particularly a hyperproliferative disorder.	
FT		
PS	Example 15; SEQ ID NO 67; 58pp; English.	
XX	The invention describes a compound (1) 8-80 nucleobases in length targeted to a nucleic acid molecule encoding AP-2 alpha. The compound specifically hybridises with a nucleic acid molecule encoding AP-2 alpha (1868 bp, SEQ ID NO: 4), and inhibits the expression of AP-2 alpha. Also described are:inhibiting the expression of AP-2 alpha in cells or tissues comprising contacting the cells or tissues with (1); screening for a modulator of AP-2 alpha by contacting a preferred target segment of a CC nuclear acid molecule encoding AP-2 alpha with one or more candidate CC modulators of AP-2 alpha, and identifying one or more modulators of AP-2 alpha expression, which modulate the expression of AP-2 alpha; a diagnostic method for identifying a disease state; and a kit or assay device comprising (1). The compound is useful for creating an animal having a disease or condition associated with AP-2 alpha, particularly a hyperproliferative disorder. The compounds may be used for diagnostics, therapeutics prophylaxis and as research reagents; or as tools in differential and/or combinatorial analyses to elucidate expression patterns of a portion or the entire complement of genes expressed within CC cells and tissues. This sequence represents a human transcription factor AP-2 antisense oligonucleotide.	
CC		
SO	Sequence 20 BP; 5 A; 6 C; 8 G; 1 T; 0 U; 0 Other;	
Query Match	0.3%; Score 15.8; DB 1; Length 20;	
Best Local Similarity	89.5%; Pred. No. 7.7e+02;	
Matches 17,	Conservative 0; Mismatches 2; Indels 0; Gaps 0;	
CY	2641 CTGCAGCTGCTGCCTGCACG 2659 DB 19 CTGCGTGTGTCGTGCCG 1	
IDB		
RESULT 600		
APOS85645/C		
KW ADOS85645 standard; DNA; 20 BP.		
XX ADOS85645;		
DZ	26-AUG-2004 (first entry)	
XX Human zinedin antisense oligonucleotide seqid 81.		
DB CNS; zinedin modulator; zinedin; zinedin associated disorder;		
KW neuronal disorder; zinedin modulator; human; antisense oligonucleotide;		
RW antisense technology; ss.		
XX Homo sapiens.		
CS		
XX		

PH	Key	Location/Qualifiers
PT	modified_base	1..20
PT		/*tag= b
PT		/mod_base= OTHER
PT		/note= "OTHER= Phosphorothioate backbone. All cytidines are 5-methylcytidines"
PT	modified_base	1..5
PT		/*tag= a
PT		/mod_base= OTHER
PT		/note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
PT	modified_base	15..20
PT		/*tag= c
PT		/mod_base= OTHER
PT		/note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FN	US2004110701-A1.	
PD	10-JUN-2004.	
PP	10-DEC-2002; 2002US-00317270.	
PR	10-DEC-2002; 2002US-00317270.	
PA	(ISIS-) ISIS PHARM INC.	
PI	Dobie KM, Sipes TB;	
DR	WPI; 2004-440381/41.	
PT	New compounds, particularly oligonucleotides targeted to a nucleic acid encoding zinedin, useful for treating diseases associated with zinedin, e.g. neuronal disorders.	
PS	Example 15; SEQ ID NO 81; 65pp; English.	
XX	The invention describes a compound 8-80 nucleobases in length targeted to, and which specifically hybridizes with, a nucleic acid molecule encoding zinedin, and inhibits the expression of zinedin. Also described are: inhibiting the expression of zinedin in cells or tissues by contacting the cells or tissues with the compound so that expression of zinedin is inhibited; screening a modulator of zinedin by contacting a preferred segment of a nucleic acid molecule encoding zinedin with one or more candidate modulators of zinedin, and identifying one or more modulators of zinedin expression which modulate the expression of zinedin; identifying a disease state by identifying the presence of zinedin in a sample using any of the primers or probes given in the specification; a kit or assay device comprising the compound; and treating an animal having a disease or condition associated with zinedin by administering to the animal a therapeutic or prophylactic amount of the compound so that expression zinedin is inhibited. The compound, composition and methods are useful for treating a disease or condition associated with zinedin, such as a neuronal disorder. They are also useful in research and diagnostics for modulating the expression of zinedin. This sequence represents a human zinedin antisense oligonucleotide.	
XX	Sequence 20 BP; 3 A; 5 C; 9 G; 3 T; 0 U; 0 Other;	
XX	Query Match	0.3%; Score 15.8; DB 1; Length 20;
XX	Best local similarity	89.5%; Pred. No. 7.7e+02;
XX	Matches 17; Conservative	0; Mismatches 2; Indels 0; Gaps 0;
DB	245 CCTGCTTGAGCCCTGAGACC 263	
	19 CCTGCTTGAGCCCTGAGACC 1	
XX	RESULT 601	
XX	AAQ75681/c	
XX	AAQ75681 standard; DNA; 21 BP.	
XX	AAQ75681;	
XX		
DT	04-AUG-1995 (first entry)	

```

XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX 16-APR-1993; 93JP-00112515.
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESSEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX
SQ Sequence 21 BP; 1 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 7.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5397 AATATCAAAAGAAAAA 5415
Db 21 AATTAATAAAAAAAAAAAAA 3

RESULT 602
AAQ75728/C
ID AAQ75728 standard; DNA; 21 BP.
XX
XX AAQ75730;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX 16-APR-1993; 93JP-00112515.
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESSEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX
SQ Sequence 21 BP; 1 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

```

```

PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 8; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESSEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX
SQ Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 7.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5390 ATTAAAAAATACAAAAA 5408
Db 20 ATTAAAAAATAAAAAAAAAA 2

RESULT 603
AAQ75728/C
ID AAQ75728 standard; DNA; 21 BP.
XX
XX AAQ75728;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KM aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX 16-APR-1993; 93JP-00112515.
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 8; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESSEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX
SQ Sequence 21 BP; 3 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 7.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5390 ATTAAAAAATACAAAAA 5408

```


Db 20 ATTAATAAAAAAAAAAAAAA 2

RESULT 604

AAQ75727/c
ID AAQ75727 standard; DNA; 21 BP.

XX AAQ75727;

DT 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

DE Analysis; gene expression; reverse transcription; primer; cDNA;

XX aggregate; restriction enzyme; ss.

OS Synthetic.

PN JF06303997-A.

PD 01-NOV-1994.

PF 16-APR-1993; 93JP-00112515.

PR 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

DR WPI; 1995-018287/03.

PT Analysis of cDNA and gene expression - by amplification of mRNA followed
by digestion with restriction enzymes.

PS Disclosure; Page 8; 11pp; Japanese.

CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
labelled reverse transcription primers (GENESRC files AAQ75547-Q75798)

CC and using the aggregate of mRNAs as the template for each reverse

CC transcription primer; (b) digesting each of the prepared aggregates of

CC the double-stranded cDNAs with restriction enzyme and; (c)

CC electrophoresing the digested aggregate of cDNAs in separate lanes. The

CC method can be used to analyse gene expression rapidly and easily

SO Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 7.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5390 ATTTAAAAATTCMAAAA 5408

DB 20 ATTAATAAAAAAAAAAAAAA 2

RESULT 605

ADG77640
ID ADG77640 standard; DNA; 21 BP.

XX ADG77640;

DT 11-MAR-2004 (first entry)

XX Canine disease marker-related PCR primer 484.

DE genetic disease; genetic trait; dog; carrier of recessive disease;

XX copper toxicosis; CT; canine genome map; breed-specific profile;

XX DNA fingerprint; dog identification; PCR; primer; ss.

OS Canis familiaris.

PN WO9731011-A1.

PD 28-AUG-1997.

PF 18-FEB-1997; 97MO-US002396.

PR 22-FEB-1996; 96US-0012060P.

XX (UNMI) UNIV MICHIGAN.

PA (UNMS) UNIV MICHIGAN STATE.

PI Brewer GJ, Venta PJ, Yuzbasiyan-Gurkan V;

DR WPI; 1997-435082/40.

PT New oligonucleotide primers for diagnosis of genetic diseases and traits
in dogs - amplify specific regions of the genome containing

PT microsatellite repeats, especially for diagnosing copper toxicosis and

PT carriers.

PS Claim 1; Page 15; 40pp; English.

CC This invention relates to novel oligonucleotide PCR primers which may be

CC used to identify markers associated with genetic diseases and traits in

CC dogs, in particular to diagnose genetic diseases that are not

CC phenotypically visible and to identify carriers of recessive diseases. A

CC specific application is diagnosis of copper toxicosis (CT). The invention

CC can also be used to create a genetic map of the canine genome; to

CC generate breed-specific profiles; to establish paternity and to identify

CC dogs from DNA fingerprints. The method provides rapid analysis of the

CC target sequences from only a small sample of DNA. Diagnosis can be done

CC at any time in the dog's life. The present sequence is that of a PCR

CC primer of the invention.

SO Sequence 21 BP; 6 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 7.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2406 GTTCTTGCAGCATGTC 2424

DB 1 GTTCATGACGACATGTC 19

AXX32871/c

AC AAX32871;

DT 27-AUG-2003 (revised)

DT 20-MAR-2003 (revised)

DT 28-JUN-1999 (first entry)

XX TFO B13 sequence.

XX Triplex-forming oligonucleotide; TFO; promoter region; pre-S gene;

XX inhibition; hepatitis B virus; HBV adr subtype; DR region; ss.

OS Synthetic.

XX Hepatitis B virus.

PN WO9920641-A1.

PD 29-APR-1999.

PF 19-OCT-1998; 98MO-CN000248.

PR 21-OCT-1997; 97CN-00106667.

XX (SHAN-) SHANGHAI INST BIOCHEMISTRY CHINESE ACAD.

XX Lu C;

DR MPI, 1999-288270/27.
XX Triplex-forming oligonucleotides, useful for, e.g. inhibition of
PT hepatitis B virus (HBV).
XX
PS Disclosure; Page 12; 39pp; Chinese.
XX
CC The invention provides triplex-forming oligonucleotides (TFO) and their
CC modified derivatives. TFO B1-B5 (AAK32862-866) can bind with the promoter
CC region of pre-S gene in inhibition of hepatitis B virus (HBV) adr subtype
CC and TFO B11, B12 and B15 (AAK32868-870) can bind with DR region of HBV.
CC The oligonucleotides are useful for inhibition of HBV and as drug in
CC treatment of hepatitis B. Since the length of the oligonucleotides can be
CC suitably increased, the stability and specificity of the formed triplex
CC DNA with 2 similar homopoly purine/homopoly pyrimidine fragments are
CC higher. Triplex formation is specifically targeting on the HBV gene
CC expression, DNA replication and reproduction, or to produce (DNA)2:RNA
CC hybrid triplex with target sequence of RNA in stopping RNA reverse
CC transcription, so there is little effect on the human cells. Such
CC oligonucleotides are chemically modified by 3'-terminal
CC monophosphorylation, leading to more significant inhibition due to their
CC higher stability, and the degradation products of the modified
CC oligonucleotides are not toxic to the body. (Updated on 20-Mar-2003 to
CC correct DR field.) (Updated on 27-AUG-2003 to correct OS field.)
XX
SQ Sequence 21 BP; 5 A; 0 C; 16 G; 0 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 7.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 92 CTCCTCCGACCCGACCTCT 110
DB 19 CTCCTCCCCCTCTCT 1
RESULT 607
AAK57097
ID AAK57097 standard; DNA; 21 BP.
XX
AC AAK57097;
XX
DT 22-JUL-1999 (first entry)
XX
DE Human mutant KCNQ2 screening primer 24.
XX
KM KCNQ2: KCNQ3; human; murine; potassium channel; diagnosis; prognosis;
KM benign familial neonatal epilepsy; BFNK; juvenile myotonic epilepsy; JME;
KM Rolandic epilepsy; mutant; treatment; screening; epilepsy; detection;
KM gene therapy; drug screening; primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO921875-A1.
XX
PD 06-MAY-1999.
XX
PF 23-OCT-1998; 98WO-US022375.
XX
PR 24-OCT-1997; 97US-0063147P.
XX
PA (UTAH) UNIV UTAH RES FOUND.
XX
PI Singh NA, Leppert MF, Charlier C;
XX
XX MPI, 1999-312938/26.
XX
PT Nucleic acid encoding potassium channels KCNQ2 and 3.
XX
PS Claim 63; Page 145; 195pp; English.
XX
CC This invention describes novel human and mouse potassium channel proteins

CC KCNQ2 and KCNQ3. Detecting mutations in sequences that encode KCNQ2 or
CC KCNQ3, or the loss of one copy of these genes, is used for diagnosis and
CC prognosis of benign familial neonatal epilepsy (BFNK), juvenile myotonic
CC epilepsy (JME) or rolandic epilepsy (RE). Cells (or transgenic animals)
CC that express wild-type or mutant KCNQ2 or 3 (also the proteins themselves
CC in cell-free form) are used to screen for agents that can be used to
CC treat or prevent these forms of epilepsy. Fragments of the encoding
CC nucleic acids are used as probes or primers, either for detecting
CC mutations or for isolation of related sequences, while the complete
CC sequences may be used in gene therapy to provide wild-type protein.
CC Antibodies specific for mutant or wild-type proteins are used as
CC diagnostic reagents and for drug screening. The KCNQ2 and 3 proteins are
CC useful in rational design of drugs and therapeutically (in replacement
CC therapies). The forms of epilepsy associated with mutations in KCNQ2 and
CC 3 sequences can now be diagnosed early (before symptoms are manifest),
CC and better treatment options will be available. AAK57074-X57139 are
CC primers used in the method of the invention
XX
SQ Sequence 21 BP; 5 A; 8 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 7.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2831 TTGAGGCGACGACACAG 2849
DB 1 TTGACGCGACGACACAG 19
RESULT 608
AAK09047
ID AAK09047 standard; DNA; 21 BP.
XX
AC AAK09047;
XX
DT 14-JUN-1999 (first entry)
XX
DE Tumour necrosis factor alpha antisense oligonucleotide.
XX
KM Tumour necrosis factor alpha; TNF-alpha; antisense oligonucleotide; ASO;
KM inhibition; expression; treatment; disease; disorder; ss.
XX
OS Synthetic.
OS Rattus rattus.
XX
PN WO901139-A1.
XX
PD 14-JAN-1999.
XX
PF 02-JUL-1998; 98WO-US013711.
XX
PR 03-JUL-1997; 97US-0051705P.
XX
PA (UYDE-) UNIV JEFFERSON THOMAS.
XX
PI Tu G, Israel Y;
XX
XX MPI, 1999-105767/09.
XX
PT Generation of antisense oligonucleotides - by specifically targeting a
PT GGA motif found in mRNA sequences.
XX
PS Example 1; Page 32; 55pp; English.
XX
CC Antisense oligonucleotides (ASO) for inhibiting a tumour necrosis factor-
CC alpha (TNF-alpha) gene in an animal, preferably a human, comprise 12-50
CC nucleotides, 90% of which are complementary to a region of mRNA
CC containing a GGA sequence motif. The ASO is used to inhibit expression
CC of a gene in an animal and for treating the animal when afflicted with a
CC disease or disorder characterised by the presence of an mRNA from a gene
CC containing a GGA motif. The ASO are specifically targeted to a GGA
CC sequence motif found in mRNA from a gene. A study of known ASO has shown
CC that at least half of the most efficacious ASO's contain one or more TCCC


```

RESULT 611
AA76158
ID AAF76158 standard; DNA; 21 BP.
XX
XX AAF76158;
XX
XX 05-JUN-2001 (first entry)
XX
XX Human oncostatin M (OM) PCR primer, SEQ ID NO:26.
XX
XX Transgenic mouse; immunodeficient; tissue recipient;
XX lymphocyte deficient; human cytokine; interleukin; IL-7; IL-6; SCF; LIF;
XX stem cell factor; leukaemia inhibitory factor; GM-CSF; M-CSF;
XX granulocyte macrophage-colony stimulating factor;
XX macrophage-colony stimulating factor; human MHC class II; DR3;
XX major histocompatibility complex; allergenicity determination;
XX human monoclonal antibody generation; haematopoietic cell development;
XX human immune system animal model; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX MO200115521-A1.
XX
XX 08-MAR-2001.
XX
XX 30-AUG-2000; 2000MO-US023971.
XX
XX 31-AUG-1999; 99US-0151688P.
XX
XX (GENV) GENENCOR INT INC.
XX
XX Huang MA, Harding FA;
XX
XX WPI; 2001-169001/17.
XX
XX New transgenic mice, useful as non-human mammalian models of human
XX disease, comprise recombination activation gene mutations and donor
XX specific transgenes encoding cytokines.
XX
XX Example 2; Page 34; 68pp; English.
XX
XX The invention relates to a transgenic immunodeficient recipient mouse
XX which is capable of supporting the growth of donor cells. In the mouse,
XX both alleles of a gene activated in early lymphocyte development are
XX disrupted, causing it to lack mature B and T cells. In particular, both
XX alleles of the recombination activation gene-2 (RAG-2) gene are
XX disrupted, which in turn prevents VDJ recombination. The mouse also
XX comprises donor (e.g., human) specific transgenes encoding the cytokines
XX interleukin-7 (IL-7), stem cell factor (SCF), leukaemia inhibitory factor
XX (LIF), granulocyte macrophage-colony stimulating factor (GM-CSF),
XX macrophage-colony stimulating factor (M-CSF), and IL-6, which enable it
XX to support the growth of transplanted donor cells. In another embodiment
XX of the invention, the mouse comprises DNA encoding the human major
XX histocompatibility complex (MHC) class II DR3 molecule, where the
XX transgene has naturally linked Drab and Dqab alleles. The transgenic
XX mouse may be used as a model for determining the allergenicity of non-
XX donor, e.g., non-human, macromolecules; to determine the effect compounds
XX have on a human immune system; to generate fully human polyclonal or
XX monoclonal antibodies to specific antigens; to determine whether
XX humanised or other monoclonal antibodies will raise a response in a human
XX immune system; to investigate the human cell mediated response to
XX pathogens and other immunomodulatory compounds; and to determine the
XX factors involved in regulating the development and function of human
XX haematopoietic cells. The transgenic mouse supports the functional
XX properties of human haematopoietic cells, unlike previous animal models
XX which produce functionally impaired haematopoietic cells or are
XX immunologically dysfunctional. In addition the transgenic mouse provides
XX a unique model system which supports T cell development in a manner which
XX more closely resembles normal ontogeny, as they possess CD4+ T cells in
XX the periphery that exhibit MHC-restricted antigen-specific responses.
XX Sequences AAF76133-AAF76192 represent human cytokine PCR primers used in

```

```

CC the development of human cytokine-expressing transgenic mice
XX
XX Sequence 21 BP; 7 A; 1 C; 11 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 15.8; DB 1; Length 21;
XX Best Local Similarity 89.5%; Pred. No. 7.8e+02;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
Qy 2434 GAGGATGAGAGGCGGAGAG 2452
DB 1 GATGCTGAGAGGCGGAGAG 19
XX
RESULT 612
AAS22374/C
ID AAS22374 standard; DNA; 21 BP.
XX
XX AAS22374;
XX
XX 24-OCT-2001 (first entry)
XX
XX Human COL9A3 PCR primer 1 for Exon 16.
XX
XX Human; collagen; COL1A1; COL1A2; COL9A1; COL9A2; COL9A3; ss;
XX osteoporosis; multiple epiphyseal dysplasia; osteogenesis imperfecta;
XX shortness of stature; low bone density; gene therapy; PCR primer.
XX
XX Homo sapiens.
XX
XX US6265157-B1.
XX
XX 24-JUL-2001.
XX
XX 03-OCT-1997; 97US-00943731.
XX
XX 03-DEC-1991; 91US-00803628.
XX
XX 13-MAR-1994; 94US-00212322.
XX
XX (UYAL-) UNIV ALLEGHENY HEALTH SCI.
XX (UYUE-) UNIV JEFFERSON THOMAS.
XX (UYOU-) UNIV OUTU.
XX
XX Prockop DJ, Spotila LD, Deltas CD, Sereda L;
XX Westerhausen Larson A, Pack M, Collige A, Early J, Koerkhoe J;
XX Ala-Kokko L, Annunen S, Pihlajamäe T, Vuorio M, Paasilta P;
XX
XX WPI; 2001-432201/46.
XX
XX Detecting collagen gene alteration, useful for diagnosing osteoporosis,
XX multiple epiphyseal dysplasia, osteogenesis imperfecta, shortness of
XX stature and low bone density in humans.
XX
XX Claim 8; Fig 25; 617pp; English.
XX
XX The invention relates to Detecting a collagen gene alteration associated
XX with a pathological condition in a human subject by obtaining from the
XX subject a sample nucleic acid containing a portion of at least 15
XX consecutive nucleotides of the segment of the COL1A1 gene extending in
XX the 5' to 3' direction from 78 nucleotides of intron 27 located adjacent
XX exon 28 through the 3' end of intron 51, where the portion contains an
XX intronic nucleotide and a first and second site, determining the sequence
XX of the portion and comparing the sequence of the portion with the
XX corresponding consensus sequence of the COL1A1 gene where a difference
XX between the sequence of the portion and the consensus sequence indicates
XX the presence of the collagen alteration in the subject. The method is
XX used for detecting abnormalities in a COL1 or COL9 gene is useful for
XX determining whether a subject is afflicted with pathological conditions
XX associated with an altered collagen gene such as osteoporosis, multiple
XX epiphyseal dysplasia, osteogenesis imperfecta, shortness of stature and
XX low bone density. Identification of an abnormality in a collagen gene is
XX also useful for designing a therapeutic nucleotide or gene therapy agent
XX which can be administered to the subject to correct or alleviate the
XX abnormality. The method is useful for detecting mutations in both the

```

CC coding and non-coding sequences of any of the COL1 or COL9 genes.
 CC Therefore the method can be used to detect collagen gene alterations
 CC which affect either the primary sequence of a collagen protein chain,
 CC splicing of the mRNA encoding such chains or regulation of expression of
 CC the genes encoding such chains. The present sequence is a PCR primer
 CC which amplifies a nucleic acid from a collagen gene of the invention
 XX

SO Sequence 21 BP; 4 A; 11 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 21;
 Best Local Similarity 89.5%; Pred. No. 7.8e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 515 GCACAGAGATGCTGCGG 533
 DB 19 GGTGAGAGATGCTGAGG 1

RESULT 613
 ID ABS78296 standard; DNA; 21 BP.
 AC ABS78296;
 XX
 DT 13-DEC-2002 (first entry)
 XX
 DE Angiogenesis inhibitory oligonucleotide #780.
 XX
 KM Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
 KM tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
 KM diabetic retinopathy; retinopathy of prematurity; macular degeneration;
 KM corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
 KM rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;
 KM plaque neovascularisation; telangiectasia; haemophilic joint;
 KM angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
 KM scleroderma; hypertrophic scar.
 XX
 OS Synthetic.
 XX
 PN WO200253141-A2.
 XX
 PD 11-JUL-2002.
 XX
 PF 14-DEC-2001; 2001WO-US048458.
 XX
 PR 14-DEC-2000; 2000US-0255534P.
 XX
 PA (COLE-) COLEY PHARM GROUP INC.
 XX
 PI Bratzler RL;
 XX
 DR WPI; 2002-566690/60.
 XX
 XX Inhibiting angiogenesis in a subject, involves administering at least one
 PT antiangiogenic nucleic acid molecule to the subject.
 XX
 PS Claim 2, Page 33; 276pp; English.
 XX
 XX The invention relates to inhibiting angiogenesis in a subject, comprising
 CC administering at least one antiangiogenic nucleic acid molecule. Also
 CC included is a kit comprising a first container housing the antiangiogenic
 CC nucleic acids, and instructions for administering them to a subject
 CC having a condition characterised by unwanted angiogenesis. The method is
 CC useful for inhibiting angiogenesis associated with solid tumour growth,
 CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
 CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
 CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
 CC rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
 CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
 CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
 CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
 CC acid of the invention
 XX

SO Sequence 21 BP; 0 A; 7 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 21;
 Best Local Similarity 89.5%; Pred. No. 7.8e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2641 CTGCAGTCTGCTGCGAGC 2659
 DB 1 CTGCTGCTGCTGCTGCTGC 19

RESULT 614
 ID ABL38849 standard; DNA; 21 BP.
 AC ABL38849;
 XX
 DT 16-APR-2002 (first entry)
 XX
 DE Immunostimulatory nucleic acid SEQ ID NO: 240.
 XX
 KM Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
 KM angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..21
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "phosphorothioate backbone"
 XX
 PN WO200197843-A2.
 XX
 PD 27-DEC-2001.
 XX
 PF 22-JUN-2001; 2001WO-US020154.
 XX
 PR 22-JUN-2000; 2000US-0213346P.
 XX
 PA (IOWA) UNIV IOWA RES FOUND.
 XX
 PI Weiner G, Hartmann G;
 XX
 DR WPI; 2002-154611/20.
 XX
 XX Treating or preventing cancer, such as basal cell carcinoma, comprises
 PT administering immunostimulatory nucleic acids that induce expression of
 PT cell surface antigens and antibodies to a subject having or at risk of
 PT developing cancer.
 XX
 XX Disclosure; Page 156; 312pp; English.
 PS
 XX
 XX The present invention relates to methods for treating or preventing
 CC cancer, involving administering to a subject having or at risk of
 CC developing cancer immunostimulatory nucleic acids that induce expression
 CC of cell surface antigens and antibodies. The methods are useful for
 CC treating or preventing cancer such as basal cell carcinoma, bladder
 CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
 CC breast cancer, cervical cancer, colon and rectum cancer, connective
 CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
 CC cancer, leukaemia, liver cancer, lung cancer, melanoma, oral cavity cancer, ovarian
 CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
 CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
 CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
 CC present sequence is an immunostimulatory oligonucleotide described in the
 CC exemplification of the invention
 XX
 SO Sequence 21 BP; 0 A; 7 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 21;
 Best Local Similarity 89.5%; Pred. No. 7.8e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
QY      2641 CTGCAGCTGCTGCTGCAGC 2659
      |||||
      1 CTGCTGCTGCTGCTGCTGC 19

RESULT 615
AAL44216/c
ID      AAL44216 standard; DNA; 21 BP.
XX
XX
AC      AAL44216;
XX
XX
DT      24-OCT-2002 (first entry)
XX
XX
DE      Human I-kappa beta associated protein (IKAP) gene PCR primer #26.
XX
XX
KW      Human; PCR; ss; single nucleotide polymorphism; SNP; bronchial asthma;
XX      I-kappa beta associated protein; IKAP; primer; infant bronchial asthma.
XX
XX      Homo sapiens.
XX
XX      WO200259305-A1.
XX
XX      01-AUG-2002.
XX
XX      25-JAN-2002; 2002WO-0P00540.
XX
XX      25-JAN-2001; 2001JP-00017076.
XX
XX      (SAKA ) OTSUKA PHARM CO LTD.
XX
XX      Nakamura Y, Tamari M;
XX
XX      WPI; 2002-557950/59.
XX
XX      Detection of specific single nucleotide polymorphisms in human I-kappa
XX      beta associated protein for analysis of etiology of bronchial asthma.
XX
XX      Claim 12; Page 55; 60pp; Japanese.
XX
XX      The invention comprises a method for detecting single nucleotide
XX      polymorphisms (SNPs) in genes associated with human bronchial asthma. The
XX      method specifically refers to detecting polymorphisms in the gene
XX      encoding human I-kappa beta associated protein (IKAP). The invention also
XX      comprises primers and probes for use in the method of the invention. The
XX      method of the invention is useful for analysis of the etiology of
XX      bronchial asthma (especially infant bronchial asthma). The present DNA
XX      sequence represents a human I-kappa beta associated protein gene PCR
XX      primer
XX
XX      Sequence 21 BP; 6 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
SQ
Query Match      0.3%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 7.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      3625 AGCAAGATCTTCCCAATG 3643
      |||||
      19 AGCAAGCTCTTCAATG 1

Db

RESULT 616
ABK10202
ID      ABK10202 standard; DNA; 21 BP.
XX
XX
AC      ABK10202;
XX
XX
DT      21-MAY-2002 (first entry)
XX
XX
DE      Double stranded DNA isolation (CTG) 7 repeat sequence.
XX
XX
KW      Single stranded DNA isolation; DNA purification; CTG repeat; ds.
XX
```

```
OS      Synthetic.
XX
XX      Key      Location/Qualifiers
FH      repeat_region 1..21
FT      /*tag= a
FT      /rpt_type= TANDEM
FT      repeat_unit 1..3
FT      /*tag= b
FT      /note= "CTG type repeat"
XX
XX      MO200210182-A2.
XX
XX      07-FEB-2002.
XX
XX      18-JUL-2001; 2001WO-US022782.
XX
XX      02-AUG-2000; 2000US-0222686P.
XX
XX      (PEKE ) PE CORP NY.
XX
XX      Chiesa C, Schroth GP, Egholm M;
XX
XX      WPI; 2002-188719/24.
XX
XX      Isolating one strand of double-stranded nucleic acid, by contacting
XX      double stranded nucleic acid having first and second strands with
XX      competitor oligo to form first strand-oligo complex and isolating the
XX      complex.
XX
XX      Disclosure; Page 12; 61pp; English.
XX
XX      This invention relates to a novel method for isolating one strand of
XX      double-stranded target nucleic acid. The method comprises contacting a
XX      double stranded target DNA molecule with a competitor oligonucleotide
XX      capable of hybridising to the first strand of the double stranded
XX      molecule. The method is performed under conditions in which the first
XX      strand dissociates from the second and hybridises with the competitor
XX      oligonucleotide to form a heteroduplex. The method of the invention is
XX      useful for separating a strand from a double-stranded target nucleic
XX      acid. The method is rapid, efficient and specific for isolating a single
XX      strand from a double-stranded nucleic acid. Because the method provides
XX      easy and efficient recovery of the single stranded DNA, the method is
XX      advantageously used to purify a first strand from a double-stranded
XX      nucleic acid that is a polymerase chain reaction (PCR) amplification
XX      product from a pool of related or unrelated sequences in high yield for
XX      subsequent use. The method also permits capture and/or recovery of the
XX      first strand of a double-stranded target nucleic acid from biological
XX      samples or other samples containing large molecule contaminants. The
XX      present sequence represents a double stranded (CTG) 7 DNA molecule used to
XX      isolate double stranded DNA molecules in an example of a similar method
XX      to that of the invention
XX
XX      Sequence 21 BP; 0 A; 7 C; 7 G; 7 T; 0 U; 0 Other;
SQ
Query Match      0.3%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 7.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      2641 CTGCAGCTGCTGCTGCAGC 2659
      |||||
      1 CTGCTGCTGCTGCTGCTGC 19

Db

RESULT 617
ACC42594
ID      ACC42594 standard; DNA; 21 BP.
XX
XX
AC      ACC42594;
XX
XX
DT      26-AUG-2003 (first entry)
XX
XX
DE      Human oncostatin M, OM, PCR primer OSM3R1.
XX
```

XX	Human; PCK; primer; transgenic mouse; lymphocyte maturation; IL-3; IL-7;
KW	cytokine; interleukin-3; interleukin-6; IL-6; interleukin-7; M-CSF; SCF;
KM	macrophage-colony stimulating factor; stem cell factor; oncostatin M; OM;
KW	granulocyte-colony stimulating factor; GM-CSF; LIF;
KW	leukemia inhibitory factor; sB.
XX	
OS	Homo sapiens.
XX	
XX	MO2003018744-A2.
XX	
XX	06-MAR-2003.
XX	
PD	05-AUG-2002; 2002WO-US024807.
XX	
PR	23-AUG-2001; 2001US-00938689.
XX	
PA	(GENV) GENENCOR INT INC.
XX	
PI	Harding PA, Huang M;
DR	WPI; 2003-278650/27.
XX	
PT	New recipient mammal, preferably a mouse, useful as a model of human
PT	disease to assess efficacy of therapeutic or prophylactic treatments, or
PT	for facilitating production of donor-specific functional immunity.
XX	
PS	Example; Page 32; 70pp; English.
XX	
CC	The present invention relates to a new transgenic mouse, which comprises
CC	a disruption in both alleles of a gene such that lymphocyte maturation
CC	does not occur and exogenous cytokines. The cytokines are selected from:
CC	interleukin-3 (IL-3), interleukin-6 (IL-6), interleukin-7 (IL-7),
CC	macrophage-colony stimulating factor (M-CSF), granulocyte-colony
CC	stimulating factor (GM-CSF), stem cell factor (SCF), leukemia inhibitory
CC	factor (LIF) and oncostatin M (OM). The gene disruption is in a gene that
CC	modulated VDJ recombination e.g. a RAG gene. The gene is disrupted by
CC	insertion of a transgene comprising major histocompatibility complex
CC	(MHC) Class II DR3 and DQ2 genes. The transgenic mouse is useful as a
CC	model of human disease to assess efficacy of therapeutic or prophylactic
CC	treatments, or to assess the antigenic potential of compounds. The
CC	transgenic mouse is also useful for supporting donor haematopoietic stem
CC	cells or facilitating production of donor-specific functional immunity.
CC	PCR primers ACC42571-ACC42639 were used to generate the transgenic mouse
XX	
XX	Sequence 21 BP; 7 A; 1 C; 11 G; 2 T; 0 U; 0 Other;
QY	
QY	2434 GAGGATGAGAAGCGAGAG 2452
DB	1 GATGCTGAGAGCGGAGAG 19
DB	
DB	Immunostimulatory nucleic acid #753.
DB	
DB	Immunostimulatory nucleic acid #753.
DB	
DB	Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
DB	antiviral; gene therapy; vaccine; non-allergic inflammatory disease;
DB	psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
DB	inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
DB	
DB	Synthetic.
DB	
DB	US2003050268-A1.

PD 13-MAR-2003.
 PF 29-MAR-2002, 2002US-00112653.
 PR 29-MAR-2001, 2001US-0279642P.
 PA (KRIE//) KRIEG A M.
 PA (BERG//) BERG D J.
 PI Krieg AM, Berg DJ;
 DR WPI, 2003-521815/49.
 XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 XX allergic contact dermatitis, latex dermatitis or inflammatory bowel
 XX disease by administering an immunostimulatory nucleic acid.
 PS Disclosure, Page 29, 229pp; English.
 XX
 XX The invention describes a method of treating non-allergic inflammatory
 XX disease comprising administering to a subject having or at risk of
 XX developing a non-allergic inflammatory disease an immunostimulatory
 XX nucleic acid for prevention or treatment of the disease. The method is
 XX useful for treating non-allergic inflammatory diseases, such as
 XX psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 XX inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 XX This sequence represents an immunostimulatory nucleic acid
 XX
 SQ Sequence 21 BP; 0 A; 7 C; 7 G; 7 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.8; DB 1; Length 21;
 Best Local Similarity 89.5%; Pred. NO. 7.8e+02;
 Matches 17, Conservative 0, Mismatches 2, Indels 0, Gaps 0,
 QY 2641 CTGCAGCTGCTGCTGCAGC 2659
 Db 1 CTGCTGCTGCTGCTGCTGC 19
 RESULT 619
 ADB37082
 ID ADB37082 standard; DNA, 21 BP.
 XX ADB37082;
 AC
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Immunostimulatory nucleic acid #96.
 KW ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
 KW hypo-responsive subject; immunostimulatory.
 OS Synthetic.
 PN US2003087848-A1.
 PD 08-MAY-2003.
 PF 02-FEB-2001, 2001US-00776479.
 PR 03-FEB-2000, 2000US-0179991P.
 PA (BRAT//) BRATZLER R L.
 PA (PETR//) PETERSEN D M.
 PA (FOUR//) FOURON Y.
 PI Bratzler RL, Petersen DM, Fouron Y;
 DR WPI, 2003-657977/62.
 XX Treating and/or preventing allergy or asthma using an immunostimulatory
 XX nucleic acid alone or in combination with an asthma/allergy medicament.

XX Disclosure; Page 16; 221pp; English.
PS
XX
CC The invention relates to a method of treating or preventing allergy or
CC asthma which comprises administering to a subject a poly-G nucleic acid
CC in an aerosol formulation. The methods and compositions of the present
CC invention are useful for diagnosing and/or treating asthma and allergy
CC especially in a hypo-responsive subject. The present sequence represents
CC an immunostimulatory nucleic acid of the invention.
XX
SQ Sequence 21 BP; 0 A; 7 C; 7 G; 7 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 7.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2641 CTGCAGCTGCTGCTGCAGC 2659
DB 1 CTGCTGCTGCTGCTGCTGC 19
RESULT 620
ADG45359
ID ADG45359 standard; DNA; 21 BP.
XX
AC ADG45359;
XX
DT 26-FEB-2004 (first entry)
XX
DB Human ERRA1pha cDNA, PCR primer #1.
XX
KW Breast cancer prognosis; human; oestrogen-related receptor alpha;
KW ERRA1pha; breast cancer cell; ERE-dependent transcription; PCR; primer;
KW ss.
XX
OS Homo sapiens.
XX
PN US2003152959-A1.
XX
PD 14-AUG-2003.
XX
PF 05-SEP-2002; 2002US-00235079.
XX
PR 27-FEB-1997; 97US-0033808P.
PR 26-FEB-1998; 98US-00031250.
PR 20-JAN-2000; 2000US-00488730.
XX
PA (MERT/) MERTZ J E.
PA (JOHN/) JOHNSTON S D.
PA (KRAU/) KRAUS R J.
PA (ARIA/) ARIAZI E A.
PI
PI Mertz JE, Johnston SD, Kraus RJ, Ariazi EA;
XX
XX WPI; 2003-897710/82.
XX
PT Determination of prognosis of breast cancer patient comprises determining
PT level of estrogen-related receptor alpha expression in breast cancer
PT cells where high level indicates poor prognosis and low level indicates
PT more favorable prognosis.
XX
XX Example 3; SEQ ID NO 7; 76pp; English.
XX
CC The present invention relates to methods of prognosis of a breast cancer
CC patient. The method comprises determining the level of oestrogen-related
CC receptor alpha (ERRA1pha) expression in breast cancer cells, where a high
CC level indicates a poor prognosis and a low level indicates a more
CC favourable prognosis. Also disclosed is a method of categorising breast
CC cancer patients based on ERRA1pha status by determining the expression
CC level of ERRA1pha in the breast cancer cells of the breast cancer
CC patient, a method of identifying a human subject for further breast
CC cancer examination by determining whether a mutation exists in the
CC ERRA1pha gene, a method of treating breast cancer by determining whether

CC ERRA1pha is an activator or repressor of ERE-dependent transcription in
CC the breast cancer cells, and decreasing ERRA1pha activity in the breast
CC cancer cells if ERRA1pha is an activator and increasing ERRA1pha activity
CC in the breast cancer cells if ERRA1pha is a repressor, and a method of
CC identifying an agent that modulates ERRA1pha expression. The methods of
CC the invention are useful determining prognosis of a breast cancer
CC patient. The invention identifies more biomarkers and treatment targets
CC for breast cancer. The biomarker identified can predict prognosis and
CC help patients make treatment choices. The present sequence represents a
CC PCR primer used in the examples of the present invention.
XX
SQ Sequence 21 BP; 5 A; 5 C; 4 G; 7 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 7.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2720 AACGTATGGCCCATTTGCA 2738
DB 2 AAGTGTGGCCCATTTCTA 20
RESULT 621
ADJ13145/C
ID ADJ13145 standard; DNA; 21 BP.
XX
AC ADJ13145;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human DNA probe used to immobilise CpG methylated DNA SeqID 272.
XX
KW probe; ss; chemical modification; methylation; array; CpG island;
KW tumour suppressor; p16; human; H69; H1618.
XX
OS Homo sapiens.
XX
PN US2003152950-A1.
XX
PD 14-AUG-2003.
XX
PF 27-JUN-2002; 2002US-00184085.
XX
PR 27-JUN-2001; 2001US-0301370P.
XX
PA (GARN/) GARNER H R.
PA (MINN/) MINNA J D.
PA (LUEB/) LUEBKE K J.
PA (BALO/) BALOG R P.
XX
PI Garner HR, Minna JD, Luebke KJ, Balog RP;
XX
XX WPI; 2003-874843/81.
XX
PT Analysis of chemical modification of DNA involves obtaining sample of DNA
PT to be analyzed, treating DNA with chemical reagents that result in
PT different base sequences, and determining sequence of resulting DNA.
XX
XX Example 1; SEQ ID NO 272; 210pp; English.
XX
CC This invention relates to a novel method for analysing chemically
CC modified macromolecules. Specifically, it refers to a high throughput
CC method for the parallel analysis of many potential sites of chemical
CC modification (e.g. methylation) in DNA. The present invention describes
CC treating the DNA with one or more chemical reagents that result in
CC different base sequences depending upon the presence or absence of the
CC modification of interest. Accordingly, a device comprising an array of
CC probes is provided to hybridise with and select the altered DNA sequences
CC that comprise the modifications of interest such as a CpG island. In
CC particular, this invention refers to analysing the methylation pattern of
CC a region of the promoter for the tumour suppressor gene p16 from two
CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
CC is a human DNA probe used to immobilise CpG methylated DNA of the

XX	Sequence	21 BP, 4 A, 12 C, 0 G, 5 T, 0 U, 0 Other;
XX	Query Match	0.3%; Score 15.8; DB 1; Length 21;
XX	Best Local Similarity	89.5%; Pred. No. 7.8e+02;
XX	Matches	17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY	2436 GGATGAGAGGGGAGAGGT 2454	
DB	20 GGATGAGAGGTGGAGAGGT 2	
RESULT 622		
ID	ADJ13037/c	
XX	ADJ13037 standard; DNA; 21 BP.	
AC	ADJ13037;	
XX	20-MAY-2004 (first entry)	
DT		
DE	Human DNA probe used to immobilise CpG methylated DNA SegID 164.	
XX	probe; see chemical modification; methylation; array; CpG island;	
KM	tumour suppressor; p16; human; H69; H1618.	
XX		
OS	Homo sapiens.	
XX	US2003152950-A1.	
PN	14-AUG-2003.	
XX	27-JUN-2002; 2002US-00184085.	
PR	27-JUN-2001; 2001US-0301370P.	
XX		
PA	(GARRN/) GARNER H R.	
PA	(MINN/) MINNA J D.	
PA	(LUEB/) LUEBKE K J.	
PA	(BALO/) BALOG R P.	
XX		
PI	Garnier HR, Minna JD, Luebke KJ, Balog RP;	
XX	WPI; 2003-874843/81.	
DR		
PT	Analysis of chemical modification of DNA involves obtaining sample of DNA	
PT	to be analyzed, treating DNA with chemical reagents that result in	
PT	different base sequences, and determining sequence of resulting DNA.	
XX		
PS	Example 1; SEQ ID NO 164; 210pp; English.	
XX		
CC	This invention relates to a novel method for analysing chemically	
CC	modified macromolecules. Specifically, it refers to a high throughput	
CC	method for the parallel analysis of many potential sites of chemical	
CC	modification (e.g. methylation) in DNA. The present invention describes	
CC	treating the DNA with one or more chemical reagents that result in	
CC	different base sequences depending upon the presence or absence of the	
CC	modification of interest. Accordingly, a device comprising an array of	
CC	probes is provided to hybridise with and select the altered DNA sequences	
CC	that comprise the modifications of interest such as a CpG island. In	
CC	particular, this invention refers to analysing the methylation pattern of	
CC	a region of the promoter for the tumour suppressor gene p16 from two	
CC	human lung tumour cell lines H69 and H1618. This oligonucleotide sequence	
CC	is a human DNA probe used to immobilise CpG methylated DNA of the	
CC	invention.	
XX		
SQ	Sequence 21 BP, 3 A, 12 C, 0 G, 5 T, 0 U, 0 Other;	
Query Match	0.3%; Score 15.8; DB 1; Length 21;	
Best Local Similarity	89.5%; Pred. No. 7.8e+02;	
Matches	17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	
QY	2436 GGATGAGAGGGGAGAGGT 2454	

[illegible]

XX	20-MAY-2004	(first entry)
DT		
XX	Human DNA probe used to immobilise CpG methylated DNA SegID 199.	
DE		
XX	probe; ss; chemical modification; methylation; array; Cpg island;	
KW	tumour suppressor; p16; human; H69; H1618.	
XX		
OS	Homo sapiens.	
XX		
PN	US2003152950-A1.	
PD		
PP	14-AUG-2003.	
XX		
PF	27-JUN-2002; 2002US-00184085.	
XX		
PR	27-JUN-2001; 2001US-0301370P.	
XX		
PA	(GAR//) GARNER H R.	
PA	(MINN/) MINNA J D.	
PA	(LUEB/) LUEBE K J.	
PA	(BALO/) BALOG R P.	
XX		
P1	Gartner HR, Minna JD, Luebke KJ, Balog RP;	
XX		
DR	WPI; 2003-874843/81.	
XX		
PT	Analysis of chemical modification of DNA involves obtaining sample of DNA	
PT	to be analyzed, treating DNA with chemical reagents that result in	
PT	different base sequences, and determining sequence of resulting DNA.	
PS		
XX	Example 1; SEQ ID NO 199; 210bp; English.	
CC	This invention relates to a novel method for analysing chemically	
CC	modified macromolecules. Specifically, it refers to a high throughput	
CC	method for the parallel analysis of many potential sites of chemical	
CC	modification (e.g. methylation) in DNA. The present invention describes	
CC	treating the DNA with one or more chemical reagents that result in	
CC	different base sequences depending upon the presence or absence of the	
CC	modification of interest. Accordingly, a device comprising an array of	
CC	probes is provided to hybridise with and select the altered DNA sequences	
CC	that comprise the modifications of interest such as a Cpg island. In	
CC	particular, this invention refers to analysing the methylation pattern of	
CC	a region of the promoter for the tumour suppressor gene p16 from two	
CC	human lung tumour cell lines H69 and H1618. This oligonucleotide sequence	
CC	is a human DNA probe used to immobilise CpG methylated DNA of the	
CC	invention.	
XX		
SQ	Sequence 21 BP; 3 A; 12 C; 1 G; 5 T; 0 U; 0 Other;	
OY		
DB		
Query Match	0.3%; Score 15.8; DB 1; Length 21;	
Best Local Similarity	89.5%; Pred. No. 7.8e+02;	
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;		
2436 GGATGAGAAAGCGAGAGGT 2454		
21 GGATGAGAGCGCGAGAGGT 3		
RESULT 625		
ADJ13144/C		
ID ADJ13144 standard; DNA; 21 BP.		
AC ADJ13144;		
XX		
DT 20-MAY-2004 (first entry)		
XX		
DE Human DNA probe used to immobilise CpG methylated DNA SegID 271.		
XX		
KM probe; ss; chemical modification; methylation; array; Cpg island;		
KW tumour suppressor; p16; human; H69; H1618.		
XX		
OS Homo sapiens		

XX	US003152950-A1.
XX	14-AUG-2003.
XX	27-JUN-2002; 2002US-00184085.
XX	27-JUN-2001; 2001US-0301370P.
XX	(GARN/) GARNER H. R.
XX	(MINN/) MINNA J. D.
XX	(LUEB/) LUEBKE K. J.
XX	(BALO/) BALOG R. P.
XX	Garner HR, Minna JD, Luebke KJ, Balog RP;
XX	WPI; 2003-874843/81.
XX	Analysis of chemical modification of DNA involves obtaining sample of DNA
XX	to be analyzed, treating DNA with chemical reagents that result in
XX	different base sequences, and determining sequence of resulting DNA.
XX	Example 1; SEQ ID NO 271; 210bp; English.
XX	This invention relates to a novel method for analysing chemically
XX	modified macromolecules. Specifically, it refers to a high throughput
XX	method for the parallel analysis of many potential sites of chemical
XX	modification (e.g. methylation) in DNA. The present invention describes
XX	treating the DNA with one or more chemical reagents that result in
XX	different base sequences depending upon the presence or absence of the
XX	modification of interest. Accordingly, a device comprising an array of
XX	probes is provided to hybridise with and select the altered DNA sequences
XX	that comprise the modifications of interest such as a CpG island. In
XX	particular, this invention refers to analysing the methylation pattern of
XX	a region of the promoter for the tumour suppressor gene p16 from two
XX	human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
XX	is a human DNA probe used to immobilise CpG methylated DNA of the
XX	invention.
XX	Sequence 21 BP; 4 A; 12 C; 0 G; 5 T; 0 U; 0 Other;
XX	Query Match 0.3%; Score 15.8; DB 1; Length 21;
XX	Best Local Similarity 89.5%; Pred. No. 7.8e+02;
XX	Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX	2436 GGATGAGAGGGGAGAGGT 2454
XX	21 GGATGAGAGGTGGAGAGGT 3
XX	RESULT 626
XX	ADJ13073/C
XX	ID ADJ13073 standard; DNA; 21 BP.
XX	AC
XX	ADJ13073;
XX	20-MAY-2004 (first entry)
XX	Human DNA probe used to immobilise CpG methylated DNA SegID 200.
XX	probe; ss; chemical modification; methylation; array; CpG island;
XX	tumour suppressor; p16; human; H69; H1618.
XX	Homo sapiens.
XX	US2003152950-A1.
XX	14-AUG-2003.
XX	27-JUN-2002; 2002US-00184085.
XX	27-JUN-2001; 2001US-0301370P.

PA (GARN/) GARNER H R.
PA (MINN/) MINNA J D.
PA (LUEB/) LUEBKE K J.
PA (BALO/) BALOG R P.
PI Garner HR, Minna JD, Luebke KJ, Balog RP,
XX WPI; 2003-874843/81.
XX
PT Analysis of chemical modification of DNA involves obtaining sample of DNA
PT to be analyzed, treating DNA with chemical reagents that result in
XX different base sequences, and determining sequence of resulting DNA.
XX
PS Example 1, SEQ ID NO 200; 210pp; English.
CC This invention relates to a novel method for analysing chemically
CC modified macromolecules. Specifically, it refers to a high throughput
CC method for the parallel analysis of many potential sites of chemical
CC modification (e.g. methylation) in DNA. The present invention describes
CC treating the DNA with one or more chemical reagents that result in
CC different base sequences depending upon the presence or absence of the
CC modification of interest. Accordingly, a device comprising an array of
CC probes is provided to hybridise with and select the altered DNA sequences
CC that comprise the modifications of interest such as a CpG island. In
CC particular, this invention refers to analysing the methylation pattern of
CC a region of the promoter for the tumour suppressor gene p16 from two
CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
CC is a human DNA probe used to immobilise CpG methylated DNA of the
CC invention.
SQ Sequence 21 BP; 3 A; 12 C; 1 G; 5 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 7.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2436 GCATGAGAGCGGAGAGGT 2454
Db 20 GCATGAGAGCGGAGAGGT 2
RESULT 627
ADJ31733
ID ADJ31733 standard; DNA; 21 BP.
XX
AC ADJ31733;
XX
DT 22-APR-2004 (first entry)
XX
DE Human amyloid beta precursor DNA amplifying reverse PCR primer.
XX
KW Amyloid beta protein precursor; neurodegenerative disorder;
KW Alzheimer's disease; apoptosis; diagnosis; therapy; human; PCR; primer;
KW ss.
XX
OS Homo sapiens.
XX
PN US2003232435-A1.
XX
PD 18-DEC-2003.
XX
PF 14-JUN-2002; 2002US-00173208.
XX
PR 14-JUN-2002; 2002US-00173208.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Double KM,
XX
DR WPI; 2004-061283/06.
XX
PT New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding an amyloid beta protein precursor, useful for

PT treating Alzheimer's disease or a disease involving aberrant apoptosis.
XX
PS Example 13; SEQ ID NO 6; 48pp; English.
XX
CC The present invention is directed to antisense oligonucleotides targeted
CC to a nucleic acid encoding amyloid beta protein precursor and which
CC modulates the expression of amyloid beta protein precursor. The invention
CC is useful for treating a disease or condition associated with amyloid
CC beta protein precursor such as a neurodegenerative disorder e.g.
CC Alzheimer's disease or a disease or condition involving aberrant
CC apoptosis. They are also useful in research and diagnostics for
CC modulating the expression of amyloid beta protein precursor. The present
CC sequence is human amyloid beta precursor DNA amplifying PCR primer.
XX
SQ Sequence 21 BP; 9 A; 7 C; 4 G; 1 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 7.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 5170 CACAGGTCAGCCCAAAA 5188
Db 1 CACAGGTCAGCCCAAAA 19
RESULT 628
ADL70482
ID ADL70482 standard; RNA; 21 BP.
XX
AC ADL70482;
XX
DT 20-MAY-2004 (first entry)
XX
DE RNAI for human insulin-like growth factor binding protein-5.
XX
KW RNA interference; RNAi; short interfering RNA; siRNA; human;
KW insulin-like growth factor binding protein-5; cytoskeletal;
KW neuroprotective; nootropic; gene silencing; IGFBP-5; DNA-RNA hybrid; ss.
XX
OS Homo sapiens.
XX
SY Synthetic.
FH Key Location/Qualifiers
FT modified_base 20..21
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= dtdt"
XX
PN WO2004018676-A2.
XX
PD 04-MAR-2004.
XX
PF 21-AUG-2003; 2003WO-CA001277.
XX
PR 21-AUG-2002; 2002US-0405193P.
PR 03-SRP-2002; 2002US-0408152P.
PR 20-MAY-2003; 2003US-0472387P.
XX
PA (UYBR-) UNIV BRITISH COLUMBIA.
XX
PI Jansen B, Gleave MB, Siginaevsky M, Beraldi E, Trougakos IP,
PI Gonos ES,
XX
DR WPI; 2004-226852/21.
XX
PT New RNA molecule less than 49 bases and having a sequence effective to
PT mediate degradation or block translation of mRNA that is the
PT transcriptional product of a target gene, useful for treating Alzheimer's
PT disease or cancer.
XX
PS Claim 5, SEQ ID NO 27; 63pp; English.
XX
CC The present sequence is the sense strand of a short interfering RNA

Query Match 0.3%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 7.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1174 GAAATCAGAGAAAGAGAGA 1192
DB 20 GAAAGCAGAGAAAGAGCGA 2

RESULT 631
AAT92356/c
ID AAT92356 standard; DNA; 22 BP.
XX AAT92356;
AC AAT92356;
XX 26-JAN-1998 (first entry)
XX Amino modified oligodeoxyribonucleotide.
XX
XX Amino modified oligodeoxyribonucleotide; oligonucleotide;
XX achiral linker reagent; 5-(aminomethyl)-1,3-benzenedimethanol;
XX N-fluoresceinyl-(5-aminomethyl)-1,3-benzenedimethanol;
XX hybridisation probe; PCR primer; nucleic acid sequencing;
XX affinity matrix; cloning recombinant DNA; in-vitro mutagenesis; ss.
XX
XX Synthetic.
OS
FH Key Location/Qualifiers
FT misc_difference 11
FT /*tag= a
FT /note= "n = 5-(aminomethyl)-1,3-benzenedimethanol"
FT misc_difference 12
FT /*tag= b
FT /note= "n = 5-(aminomethyl)-1,3-benzenedimethanol"
XX MO9705156-A1.
XX 13-FEB-1997.
XX 26-JUL-1996; 96WO-DK000330.
XX 27-JUL-1995; 95DK-00000863.
XX
XX (BEHR/) BEHRENS C.
XX (PETS/) PETERSEN K H.
XX (EGHO/) EGHOLM M.
XX (NIEL/) NIELSEN J.
XX (DAHL/) DAHL O.
XX
XX Behrens C, Petersen KH, Egholm M, Nielsen J, Dahl O;
XX WPI; 1997-145615/13.
XX
XX New achiral linker reagents - useful for incorporation of multiple amino
XX sps. or reporter sps. into oligonucleotide(s).
XX
XX Disclosure; Page 20; 42pp; English.
XX
XX Achiral linker reagents have been developed for the incorporation of
XX multiple amino groups into oligonucleotides. The present sequence
XX represents a modified oligodeoxyribonucleotide. The achiral linker
XX reagents can be used for incorporation of multiple primary amino groups
XX or reporter groups into oligonucleotides. They are compatible with
XX conventional DNA synthesis following the phosphoramidite methodology, and
XX can be incorporated in good yields. The linker reagents may be used for
XX labelling of oligonucleotides. They may also be used for preparation of
XX oligonucleotides, e.g. for use as hybridisation probes, for use as
XX primers in the polymerase chain reaction or in nucleic acid sequencing
XX reactions, for production of affinity matrices for purification of DNA
XX binding proteins or other biomolecules, for production of affinity
XX matrices for detection of nucleic acid sequences, for cloning recombinant
XX DNA or for in-vitro mutagenesis

XX SQ Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;
XX
XX Query Match 0.3%; Score 15.8; DB 1; Length 22;
XX Best Local Similarity 81.0%; Pred. No. 7.8e+02;
XX Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX QY 5393 AAAAAATCAAAAGAAAA 5413
XX DB 21 AAAAAAAAAAAAAAAAAAAAA 1

RESULT 632
AAV35632/c
ID AAV35632 standard; DNA; 22 BP.
XX AAV35632;
AC AAV35632;
XX 07-SEP-1998 (first entry)
XX SHOX gene exon Va (SHOXa) specific sense primer SP6.
XX
XX Homeobox domain; human growth gene; growth regulation; growth defect;
XX Turner's syndrome; short stature homeobox containing gene; short stature;
XX SHOX; bone disease; osteoporosis; calcium regulation; PCR primer; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX WO9814568-A1.
XX 09-APR-1998.
XX 29-SEP-1997; 97NO-EP005355.
XX 01-OCT-1996; 96US-0027633P.
XX 16-JAN-1997; 97EP-00100583.
XX (RAPP/) RAPPOLO-HOERBRAND G.
XX Rappold-Hoerbrand G, Rao E;
XX WPI; 1998-271719/24.
XX
XX New human growth genes - used to develop products for the diagnosis and
XX treatment of human growth defects such as short stature, e.g. Turner's
XX syndrome.
XX
XX Disclosure; Page 11; 84pp; English.
XX
XX This exon specific primer used in the PCR amplification of a short
XX stature associated sequence. The gene region corresponding to short
XX stature has been identified as a region of approximately 500 kb in the
XX PAR1 region of the X and Y chromosomes. Three genes in this region have
XX been identified as candidates for the short stature gene. These genes
XX were designated SHOX (also referred to as SHOX93 or HOS93), PFG92 and
XX SHOT (SHOX-like homeobox gene on chromosome three). The SHOX gene has two
XX separate splicing sites resulting in two variations SHOXa and SHOXb. The
XX specification provides sequences of SHOX (short stature homeobox-
XX containing) genes SHOX E92, SHOXa, SHOXb, SHOT and exons of the SHOX
XX genes as shown in AAV35610 to AAV35621 and protein sequences of the human
XX growth protein transcription factor SHOXa, SHOXb and SHOT as shown
XX in AAV60573 to AAV60575. The novel genes are responsible for human growth.
XX Defects in the genes can cause short stature, e.g. Turner's syndrome. The
XX products can be used to develop agents for the treatment of short stature
XX or other human growth disorders. The products can also be used for
XX providing a mitogenic effect on cells, e.g. for the treatment of bone
XX diseases such as osteoporosis and diseases involved with disturbance in
XX the bone calcium regulation
XX
XX Sequence 22 BP; 3 A; 9 C; 7 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 15.8; DB 1; Length 22;

Best Local Similarity 89.5%; Pred. No. 7.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3988 GCTGAGCTGAGCTGTGG 4006
|||||
Db 20 GCTGAGCTGAGCTGTGG 2

RESULT 633
AAZ07304/c
ID AAZ07304 standard; DNA; 22 BP.

AC AAZ07304;
XX
XX
XX 22-OCT-1999 (first entry)
XX

DE Human telomerase RNA gene (hTR) promoter specific primer h112c.

XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;
KW gene therapy; thymidine kinase gene; anticancer therapy; human;
KM mutagenesis; PCR primer; ss.
XX

OS Synthetic.
XX Homo sapiens.

XX W09938964-A2.

XX 05-AUG-1999.

XX 29-JAN-1999; 99MO-GB000308.

XX 29-JAN-1998; 98GB-00001902.

XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.

XX Keith WM;

XX WPI; 1999-479183/40.

PT Mouse and human telomerase RNA gene promoters, useful for tumor specific
PT gene therapy.

PS Disclosure; Fig 12; 109pp; English.

XX The invention relates to promoter regions from mouse and human telomerase
CC RNA (TR) component genes. The TR gene promoter can be linked to a
CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of
CC cancer, especially neoplasia. The telomerase is necessary for the
CC unrestricted proliferative capacity of many human cancers. Mutation or
CC dysregulation of the telomerase repression pathway may cause reactivation
CC or upregulation of telomerase expression in cancer. Substances,
CC identified in the methods, can be used to block transcription from the TR
CC gene promoter through interaction of the 5' regulatory sequences. These
CC substances, e.g. antisense oligonucleotides, transcription factors, are
CC peptide nucleic acids and factors that disrupt signal transduction, are
CC useful for cancer therapy. In particular, gene therapy vectors
CC (especially pG62-codump) comprising the promoter and a viral thymidine
CC kinase gene can be used to convert a prodru, e.g. gancyclovir, so that
CC neoplasia can be controlled or treated. Direct down-regulation of
CC telomerase RNA gene through manipulation of transcription factors may be
CC effective anticancer therapy and the cloning of the hTR gene promoter
CC allows the analysis of therapeutic molecules which modulate hTR promoter
CC activity. Sequences AAZ07696-321 represent PCR primers used in cloning
CC and mutagenesis of human TR gene (hTR) promoter region
XX

XX Sequence 22 BP; 4 A; 4 C; 10 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 22;
Best Local Similarity 89.5%; Pred. No. 7.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2179 CATTACTTGGCCAGGCTC 2197
|||||

Db 19 CATTACTTACCAGGCC 1

RESULT 634
AAA64532
ID AAA64532 standard; DNA; 22 BP.

AC AAA64532;
XX
XX 02-JAN-2001 (first entry)
XX

DE PCR primer G2 used to amplify exon 2 of human FEZ1 gene.

XX Human; FEZ1 gene; tumour suppressor gene; bp22; cancer; tumour growth;
KW tumour proliferation; tubulin; microtubule; protein EPI-gamma;
KW tubulin polymerisation disorder; mitosis initiation; cell proliferation;
KW cell growth; cell shape; cell rigidity; cell motility; DNA replication;
KM tumorigenesis; tumour survival; metastasis; PCR primer; ss.
XX

OS Homo sapiens.

XX W0200050565-A2.

XX 31-AUG-2000.

XX 25-FEB-2000; 2000MO-US004950.

XX 25-FEB-1999; 99US-0121537P.

XX (UYDE-) UNIV JEFFERSON THOMAS.

XX Croce CM, Ishii H;

XX WPI; 2000-558396/51.

PT New polynucleotide homologous with a portion of one strand of the human
PT FEZ1 gene, useful for alleviating abnormal cell proliferation such as
PT cancer.

PS Example 1; Page 45; 255pp; English.

XX PCR primers AAA64531-32 were used to amplify a fragment of the human FEZ1
CC gene. FEZ1 is a tumour suppressor gene, located at chromosome location
CC 8p22. Decreased or no expression of FEZ1 is detected in a variety of
CC cancer cells. Expression of FEZ1 inhibits tumour growth and
CC proliferation. FEZ1 also interacts with tubulin, with microtubules, and
CC with protein EPI-gamma. Post-translational phosphorylation and
CC dephosphorylation modulates the effect of the FEZ1 protein. Inhibitors of
CC FEZ1 gene expression are useful for inducing cells to proliferate.
CC Compounds which modulate FEZ1 association with tubulin are useful for
CC alleviating tubulin hyper- or hypo- polymerisation disorders, such as
CC those associated with aberrant initiation of mitosis, modulation of the
CC initiation and rate of cell proliferation and cell growth, modulation of
CC cell shape, cell rigidity, cell motility, rate and stage of cellular DNA
CC replication, intracellular distribution of organelles, metastatic
CC potential of cell and cellular transformation from a non-cancerous to
CC cancerous phenotype. Compounds which modulate FEZ1 binding and
CC phosphorylation are also useful for alleviating a disorder, such as
CC tumorigenesis, tumour survival, growth and metastasis
XX

XX Sequence 22 BP; 2 A; 10 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 22;
Best Local Similarity 89.5%; Pred. No. 7.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2640 CCTGACGCTGCTGCTGACG 2658
|||||

Db 4 CCTGACGCTGCTGCTGACG 22

RESULT 635
AAF83320/c

ID AAF83320 standard; DNA; 22 BP.
 XX AAF83320;
 AC
 XX
 DT 09-JUL-2001 (first entry)
 XX
 DE Human SAPL cDNA specific primer 4dest4 5f.
 XX
 KM SAPL, SIT4, SIT4 associated proteins like; human; antidiabetic;
 KM sporulation-induced transcript 4; SAPL; SAPL; insulin therapy; IDDM;
 KM insulin-dependent diabetes mellitus; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200129213-A1.
 PD 26-APR-2001.
 XX
 PF 19-OCT-2000; 2000WO-GB004027.
 XX
 PR 19-OCT-1999; 99US-0160400P.
 XX
 PA (WELL) WELLCOME TRUST LTD.
 PA (MERCK) MERCK & CO INC.
 XX
 PI Todd JA, Twells RCU, Hesse JW, Hey P, Hey P, Caskey CT;
 PI Hammond H, Metzker ML;
 DR WPI; 2001-300338/31.
 XX
 PT Isoforms of novel gene arising from alternative splicing and encoding
 PT highly related proteins termed as SAPL and SAPL; from the IDDM4 locus
 PT on human chromosome 11q13, useful for treating IDDM and other diseases.
 PS
 PS Claim 14; Page 98; 1239P; English.
 XX
 CC The invention relates to SAPL (SIT4-sporulation-induced transcript4)
 CC associated proteins-like polypeptide, selected from SAPL polypeptide
 CC isoforms and SAPL polypeptide isoforms. The SAPL polypeptide are
 CC useful in gene therapy for treating and preventing insulin-dependent
 CC diabetes mellitus (IDDM). Fragments of the SAPL DNA are useful as primers
 CC and probes. The SAPL polypeptides are useful in screening for a substance
 CC e.g., a peptide or chemical compound, which interacts and/or binds with
 CC them. Sequences AAF83318-350 represent PCR primers specific for the SAPL
 CC cDNA.
 CC
 SQ Sequence 22 BP; 7 A; 3 C; 8 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.3%; Score 15.8; DB 1; Length 22;
 Best Local Similarity 89.5%; Pred. No. 7.8e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2359 CACCCATCCCTCGAGCT 2377
 DB 22 CACCATCTCTCTGAGCT 4
 AC
 AC ABL45282;
 XX
 DT 11-APR-2002 (first entry)
 XX
 DE Human chromosome 1p36-35 PCR primer SEQ ID NO:2326.
 XX
 KM Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
 KM PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN JP2001321190-A.
 PA

XX
 PD 20-NOV-2001.
 XX
 PF 12-MAR-2001; 2001JP-00068285.
 XX
 PR 10-MAR-2000; 2000JP-00067716.
 XX
 PA (RIKA) RIKAGAKU KENKYUSHO.
 PA (GENO-) GENOTEX YG.
 XX
 DR WPI; 2002-144136/19.
 XX
 PT Arraying genome clones.
 XX
 PS Claim 4; Page 50; 528pp; Japanese.
 XX
 CC The present invention describes a method of arraying genome clones. The
 CC method comprises: (a) clones of the genomic libraries contained in
 CC multiwell plates numbered for discrimination are mixed in each of the
 CC multiwell plates; (b) a primer designed based on the chromosome marker
 CC sequence is added to the mixture to carry out an amplification reaction;
 CC (c) a signal corresponding to the marker is detected from the multiwell
 CC amplified product to specify the discrimination Nos. of the multiwell
 CC plates containing the clones having said marker sequence; (d) the order
 CC of the markers is changed so that the same discrimination Nos. succeed to
 CC the maximum in the specified discrimination Nos. to array the multiwell
 CC plates; (e) the clones in the multiwell plates of the specified
 CC discrimination Nos. are mixed respectively in each wells of longitudinal
 CC and lateral directions; (f) the mixed clones are cultured and the
 CC resultant cultures are amplified by using the above primer; (g) signals
 CC are detected from the amplified products; (h) the clones in the multiwell
 CC plates are specified from the detected result; and (i) the clones are
 CC reconstituted as the positions on the chromosome and arrayed. The
 CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent
 CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
 CC represent PCR primers for human chromosome 21q22.1, which are
 CC specifically claimed for use in the present invention
 CC
 SQ Sequence 22 BP; 5 A; 12 C; 0 G; 5 T; 0 U; 0 Other;
 SQ
 Query Match 0.3%; Score 15.8; DB 1; Length 22;
 Best Local Similarity 89.5%; Pred. No. 7.8e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 343 CTACCACTCCCTCTATC 361
 DB 1 CAACCACTCCCACTATC 19
 AC
 AC ABL452714;
 XX
 DT 27-AUG-2002 (first entry)
 XX
 DE Human bladder cancer antigen KU-BL-1, PCR primer #10.
 XX
 KM Human; bladder cancer antigen KU-BL-1; immunotherapy; cytostatic; cancer;
 KM PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN JP2002112779-A.
 PD 16-APR-2002.
 XX
 PF 03-OCT-2000; 2000JP-00304143.
 XX
 PR 03-OCT-2000; 2000JP-00304143.
 XX
 PA (KEIO-) GH KEIO GIJUKU.
 PA

XX
DR WPI; 2002-448753/48.
XX
PT Cancer antigens, particularly human bladder cancer antigen KU-BL-1 and
XX genes encoding for the antigens for their diagnosis and immune therapy.
XX
PS Disclosure; Page 16; 30pp; Japanese.
XX
CC The invention relates to a novel human bladder cancer antigen KU-BL-1 and
CC the DNA encoding it. The antigen is used for immunotherapy of cancers,
CC particularly human bladder cancer. The present sequence represents a
CC human bladder cancer antigen KU-BL-1-associated PCR primer
XX
SQ Sequence 22 BP; 9 A; 2 C; 10 G; 1 T; 0 U; 0 Other;
QY
Query Match 0.3%; Score 15.8; DB 1; Length 22;
Best Local Similarity 89.5%; Pred. No. 7.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Db 4770 GGAGAGGGCGAGCAAAAG 4788
4 GGAGAGAGCGAGCAAGAG 22
RESULT 638
ABV99963/c
ID ABV99963 standard; DNA; 22 BP.
XX
XX ABV99963;
AC
XX
DT 28-MAR-2003 (first entry)
XX
XX Human G protein coupled receptor-related oligonucleotide #1.
XX
KM G protein; receptor; antidiabetic; anorectic; antiparkinsonism;
KM hypotensive; neuroleptic; antidepressant; nootropic; anticonvulsant;
KM antidiabetic; human; diabetes; bulimia; anorexia; Parkinson's disease;
KM psychiatric disease; neurological disease; schizophrenia;
KM manic depression; delirium; dementia; epilepsy; migraine; insomnia;
KM circadian rhythm disorder; cognitive impairment; ss.
XX
OS Homo sapiens.
XX
XX FR823762-A1.
PN
XX
XX 25-OCT-2002.
PD
XX
XX 24-APR-2001; 2001FR-00005477.
PF
XX
XX 24-APR-2001; 2001FR-00005477.
PR
XX
XX (SERV-) LES LAB SERVIER SA.
PA
XX
XX Galizzi JP, Coge F, Rique H, Boutin JA;
PI
XX
XX WPI; 2003-078282/08.
DR
XX
XX New nucleic acid encoding G protein-coupled receptor, useful for
PT identifying specific modulators, potentially useful for treating e.g.
PT diabetes.
XX
XX Example 2; Page 21; 45pp; French.
PS
XX
CC The present invention relates to a human G protein coupled receptor and
CC its coding sequence. The coding sequence is useful for identifying
CC specific modulators. In addition, the coding sequence, and related
CC sequences, also host cells containing them, are useful for screening for
CC agonists and antagonists of the G protein coupled receptor. The coding
CC sequence is also useful for recombinant production of the G protein
CC coupled receptor, and as source of amplification probes and primers for
CC identifying pathological alleles or species homologs. Measuring the
CC expression of the G protein coupled receptor and its coding sequence are
CC useful for diagnosis, prognosis and monitoring of diseases associated

CC with aberrant expression of the G protein coupled receptor, e.g. diabetes
CC ; bulimia; anorexia; Parkinson's disease; and psychiatric/neurological
CC diseases (schizophrenia, manic depression, delirium, dementia, epilepsy,
CC migraine, insomnia, circadian rhythm disorders and cognitive impairment).
CC The present sequence is an oligonucleotide which was used in an example
CC from the invention
XX
SQ Sequence 22 BP; 4 A; 10 C; 2 G; 6 T; 0 U; 0 Other;
QY
Query Match 0.3%; Score 15.8; DB 1; Length 22;
Best Local Similarity 89.5%; Pred. No. 7.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Db 1430 ATGTGAGGAGATCGAGG 1448
20 ATGTGAGGAGATGTAAG 2
RESULT 639
ADE14215
ID ADE14215 standard; DNA; 22 BP.
XX
XX ADE14215;
AC
XX
XX 29-JAN-2004 (first entry)
DT
XX
XX Optineurin promoter motif, repeat element or regulatory region #324.
DE
XX
XX Human; optineurin; deg; ophthalmological; single nucleotide polymorphism;
KM SNP; glaucoma; progressive ocular hypertensive disorder;
KM glaucoma related disorder; motif; repeat element; regulatory region.
XX
XX Homo sapiens.
OS
XX
XX US2003190617-A1.
PN
XX
XX 09-OCT-2003.
PD
XX
XX 06-MAR-2002; 2002US-00091281.
PF
XX
XX 06-MAR-2002; 2002US-00091281.
PR
XX
XX (SIEB/) SI E.
PA (RAYM/) RAYMOND V.
PA (MORI/) MORISSETTE J.
PA
XX
XX Raymond V, Morissette J, Si E;
PI
XX
XX WPI; 2003-864168/80.
DR
XX
XX New nucleic acid sequences of the optineurin gene are useful to detect
PT polymorphisms particularly single nucleotide polymorphisms in the
PT optineurin promoter to diagnose, prognosis and treat glaucoma and related
PT disorders.
XX
XX Claim 11; SEQ ID NO 326; 159pp; English.
PS
XX
XX The invention relates to an isolated nucleic acid (N1) comprising at
CC least 20 but not more than 1500 consecutive nucleotides of the optineurin
CC promoter appearing as ADE13890. Also included are the optineurin promoter
CC operably linked to a heterologous nucleic acid, a nucleic acid capable of
CC detecting a single nucleotide polymorphism (SNP) in the optineurin
CC promoter, a host cell comprising the promoter operably linked to a
CC heterologous sequence, diagnosing or prognosing glaucoma in a sample
CC obtained from a cell or bodily fluid (comprising detecting a polymorphism
CC in a promoter region of the optineurin gene, associated with a glaucoma
CC phenotype), detecting a SNP sequence variation in a sample containing
CC DNA, detecting the presence of an optineurin promoter sequence variation
CC in a sample containing DNA, determining the presence or increased
CC susceptibility to glaucoma or to a progressive ocular hypertensive
CC disorder resulting in loss of visual field in a patient (or the severity
CC or progression of glaucoma in a patient, comprising providing a
CC amplification reaction primers that direct amplification of a selected

CC nucleic acid region containing the variation within the optineurin
CC promoter and amplifying the DNA) and detecting a polymorphism (comprising
CC obtaining a sample containing human genomic DNA, providing a nucleic acid
CC capable of detecting a SNP located within an optineurin promoter, and
CC detecting the polymorphism). The invention is used to diagnose the
CC prognosis glaucoma and also to treat glaucoma related disorders. The
CC present sequence is an optineurin promoter motif, repeat element or
CC putative regulatory region.

XX Sequence 22 BP, 3 A, 8 C, 8 G, 3 T, 0 U, 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 22;

Best Local Similarity 89.5%; Pred. No. 7.8e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3761 GGGGCCCCGAGGCGCTGT 3779

DB 4 GGGTCCCCCGGGGCTGT 22

RESULT 640

AD135141/C

ID AD135141 standard; DNA; 22 BP.

XX AD135141;

XX 22-APR-2004 (first entry)

XX P. obeus PLA2G1B gene-specific forward primer.

XX PLA2G1B; fat deposition; leanness; single nucleotide polymorphism;

XX non-insulin dependent diabetes mellitus; NIDDM; hyperinsulinemia;

XX hypertension; glucose intolerance; dyslipidemia; hypercoagulability;

XX microalbuminuria; PCR; primer; ss.

XX Paamomya obeus.

XX Synthetic.

XX WO2004002295-A2.

XX 08-JAN-2004.

XX 27-JUN-2003; 2003MO-US020830.

XX 27-JUN-2002; 2002US-0392361P.

XX (SEQU-) SEQUENOM INC.

XX Adam GIR, Langdon ML,

XX WPI, 2004-082843/08.

XX diagnosing a predisposition to fat deposition or leanness, useful for

XX detecting the presence of a polymorphism in the PLA2G1B nucleic acid from

XX the subject.

XX Example 5; Page 55; 91pp; English.

XX The invention relates to diagnosing a predisposition to fat deposition or

XX leanness in a subject comprising detecting the presence or absence of a

XX polymorphic variation associated with fat deposition at a polymorphic

XX site in a PLA2G1B nucleotide sequence in a nucleic acid sample from a

XX subject, where the presence of the polymorphic variation indicates a

XX predisposition to fat deposition in the subject. The polymorphic

XX variation is a guanine at position 7328 or thymine at position 9182 of

CC represent PCR primers based on P. obeus PLA2G1B sequence, used in

CC PLA2G1B tissue expression profiles.

XX Sequence 22 BP, 6 A, 5 C, 4 G, 6 T, 0 U, 1 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 22;

Best Local Similarity 81.0%; Pred. No. 7.8e+02;
Matches 17; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 581 AGCTGAAGAGTTCACGCTTC 601

DB 21 AGCAGAAGAGTTCATCTTS 1

RESULT 641

AD10045/C

ID AD10045 standard; DNA; 22 BP.

XX AD10045;

XX 17-JUN-2004 (first entry)

XX PCR primer 4 to amplify fat sand rat phospholipase A2 (PLA2G1B) DNA.

XX fat sand rat; PCR; ss; fat reduction; fat deposition; phospholipase A2;

XX PLA2G1B; appetite suppressant; lipase inhibitor; exercise regimen;

XX obesity; non-insulin dependent diabetes mellitus; NIDDM;

XX cardiovascular disorder; hypertension; antidiabetic; primer.

XX Paamomya obeus.

XX WO2004002296-A2.

XX 08-JAN-2004.

XX 27-JUN-2003; 2003MO-US020831.

XX 27-JUN-2002; 2002US-0392362P.

XX (SEQU-) SEQUENOM INC.

XX Adam GIR, Langdon ML, Denisenko MF, Dennis E, Cantor C;

XX Rubin B;

XX WPI, 2004-071944/07.

XX Example 5; Page 80; 116pp; English.

XX This invention relates to a novel candidate therapeutic agent useful for

XX fat reduction and disorders related to fat depositions. Specifically, it

XX refers to polymorphic variations in the phospholipase A2 (PLA2G1B) DNA,

XX which is located on chromosome 12q24 and has been associated with central

XX fat deposition. The present invention describes methods to detect the

XX presence or absence of these single nucleotide polymorphisms of PLA2G1B,

XX in particular G7328A and T9182G, and subsequently provide treatment that

XX reduces fat deposition. This treatment may consist of an appetite

XX suppressant, a lipase inhibitor, a phospholipase inhibitor, an exercise

XX regimen, a dietary regimen, psychological counseling, psychotherapy or a

XX combination thereof. Accordingly, PLA2G1B is a target for reducing fat

XX deposition and it can be used to treat both obesity and non-insulin

XX dependent diabetes mellitus (NIDDM), as well as cardiovascular disorders

CC oligonucleotide sequence is a PCR primer used to amplify fat sand rat

CC PLA2G1B DNA, used in an exemplification of the invention.

XX Sequence 22 BP, 6 A, 5 C, 4 G, 6 T, 0 U, 1 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 22;

Best Local Similarity 81.0%; Pred. No. 7.8e+02;
Matches 17; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 581 AGCTGAAGAGTTCACGCTTC 601

DB 21 AGCAGAAGAGTTCATCTTS 1

RESULT 641

AD10045/C

ID AD10045 standard; DNA; 22 BP.

XX AD10045;

XX 17-JUN-2004 (first entry)

XX PCR primer 4 to amplify fat sand rat phospholipase A2 (PLA2G1B) DNA.

XX fat sand rat; PCR; ss; fat reduction; fat deposition; phospholipase A2;

XX PLA2G1B; appetite suppressant; lipase inhibitor; exercise regimen;

XX obesity; non-insulin dependent diabetes mellitus; NIDDM;

XX cardiovascular disorder; hypertension; antidiabetic; primer.

XX Paamomya obeus.

XX WO2004002296-A2.

XX 08-JAN-2004.

XX 27-JUN-2003; 2003MO-US020831.

XX 27-JUN-2002; 2002US-0392362P.

XX (SEQU-) SEQUENOM INC.

XX Adam GIR, Langdon ML, Denisenko MF, Dennis E, Cantor C;

XX Rubin B;

XX WPI, 2004-071944/07.

XX Example 5; Page 80; 116pp; English.

XX This invention relates to a novel candidate therapeutic agent useful for

XX fat reduction and disorders related to fat depositions. Specifically, it

XX refers to polymorphic variations in the phospholipase A2 (PLA2G1B) DNA,

XX which is located on chromosome 12q24 and has been associated with central

XX fat deposition. The present invention describes methods to detect the

XX presence or absence of these single nucleotide polymorphisms of PLA2G1B,

XX in particular G7328A and T9182G, and subsequently provide treatment that

XX reduces fat deposition. This treatment may consist of an appetite

XX suppressant, a lipase inhibitor, a phospholipase inhibitor, an exercise

XX regimen, a dietary regimen, psychological counseling, psychotherapy or a

XX combination thereof. Accordingly, PLA2G1B is a target for reducing fat

XX deposition and it can be used to treat both obesity and non-insulin

XX dependent diabetes mellitus (NIDDM), as well as cardiovascular disorders

CC portal hypertension and fibrosis, also opportunistic infections,
CC particularly Pneumocystis carinii pneumonia. Also, detecting the -786C/T
CC polymorphism in the ENOS gene is useful for diagnosis. The present
CC sequence represents a double-stranded oligonucleotide of the invention.
XX
SQ Sequence 22 BP; 2 A; 8 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 22;
Best Local Similarity 89.5%; Pred. No. 7.9e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 4109 AGCCAGCCAGGAGTGAAGCT 4127
19 AGCCAGCCAGGAGGAAAGCT 1

RESULT 644
AB207924/c
ID AB207924 standard; DNA; 50 BP.

XX AB207924;

AC 09-JAN-2003 (first entry)

XX Human leukocyte gene expression profiling probe SEQ ID NO 7915.

XX T7, leukocyte, gene expression profiling; allograft rejection;
XX atherosclerosis; congestive heart failure; systemic lupus erythematosus;
XX rheumatoid arthritis; osteoarthritis; cytomegalovirus; infection; probe;
XX ss.

XX Homo sapiens.

XX WO200257414-A2.

XX 25-JUL-2002.

XX 22-OCT-2001; 2001WO-US047856.

XX 20-OCT-2000; 2000US-0241994P.

XX 08-JUN-2001; 2001US-0296764P.

XX (BIOC-) BIOCARDIA INC.

XX Wchlgemuth J, Fry K, Marcuk G, Altman P, Prentice J, Phillips J;
PI Ly N, Woodward R, Quattermous T, Johnson F;

XX WPI; 2002-636525/68.

XX New system for leukocyte expression profiling, diagnosing a disease, or
PT monitoring (the rate of) progression of a disease, e.g. atherosclerosis
or congestive heart failure, comprises diagnostic oligonucleotides.

XX Claim 1; Page 583; OP; English.

XX The invention relates to a system for detecting gene expression, which
CC comprises one or two isolated DNA molecules that detect expression of a
CC gene, where the gene corresponds to any of 8143 oligonucleotides
CC (AB200010-AB208152) each having 50 base pairs (bp). The system is useful
CC for leukocyte expression profiling. It is particularly useful for
CC diagnosing a disease, monitoring (rate of) progression of a disease,
CC predicting therapeutic outcome, determining prognosis for a patient,
CC predicting disease complications in an individual or monitoring response
CC to treatment in an individual. The diseases include cardiac allograft
CC rejection, kidney allograft rejection, liver allograft rejection,
CC atherosclerosis, congestive heart failure, systemic lupus erythematosus,
CC rheumatoid arthritis, osteoarthritis or cytomegalovirus infection
XX

XX Sequence 50 BP; 12 A; 9 C; 18 G; 11 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 50;
Best Local Similarity 60.5%; Pred. No. 7.9e+02;
Matches 26; Conservative 0; Mismatches 17; Indels 0; Gaps 0;

Qy 4022 CTCACCTTGGGCTCTCCAGGGGCGCATGTGACATCCCT 4064
DB 50 CTCACCTTGGGACACAGCCAGGCAAAATGTTCCATGTCCT 8

RESULT 645
ADP10317/c
ID ADP10317 standard; DNA; 50 BP.

XX ADP10317;

XX 12-AUG-2004 (first entry)

XX 50-mer oligonucleotide marker probe of the invention #326.

XX transplant rejection; immune system; rheumatoid arthritis; lupus;
XX inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss.

XX Homo sapiens.

XX WO2004042346-A2.

XX 21-MAY-2004.

XX 24-APR-2003; 2003WO-US012946.

XX 24-APR-2002; 2002US-00131831.

XX 20-DEC-2002; 2002US-00325899.

XX (EXPR-) EXPRESSION DIAGNOSTICS INC.

XX Wchlgemuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;
PI Rosenbery S;

XX WPI; 2004-400724/37.

XX Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
PT pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
PT rejection, in an individual, comprises detecting the expression level of
PT the gene.

XX Claim 2; SEQ ID NO 326; 1762bp; English.

XX The present invention relates to diagnosing or monitoring transplant
CC rejection, e.g. cardiac or kidney transplant rejection, in an individual
CC comprising detecting the expression level of one or more genes. The
CC methods, system and kits are useful in diagnosing or monitoring
CC transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
CC islet, lung, bone marrow or stem cell transplant rejection,
CC xenotransplant rejection or mechanical organ replacement rejection, in an
CC individual. The method is also useful in assessing the immune status of
CC an individual. The methods are also useful in diagnosing and monitoring
CC diseases that involve the immune system, e.g. rheumatoid arthritis,
CC lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
CC viral, bacterial or fungal infection. The present sequence represents a
CC 50 mer oligonucleotide marker for diagnosis and monitoring of allograft
CC rejection and other disorders.
XX

XX Sequence 50 BP; 12 A; 9 C; 18 G; 11 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.8; DB 1; Length 50;
Best Local Similarity 60.5%; Pred. No. 7.9e+02;
Matches 26; Conservative 0; Mismatches 17; Indels 0; Gaps 0;

Qy 4022 CTCACCTTGGGCTCTCCAGGGGCGCATGTGACATCCCT 4064
DB 50 CTCACCTTGGGACACAGCCAGGCAAAATGTTCCATGTCCT 8

RESULT 646
AAT7910/c
ID AAT7910 standard; DNA; 20 BP.

```

XX AC AAT27910;
XX XX
XX XX
XX DT 28-JAN-1997 (first entry)
XX XX
XX DE 5'-anchored simple sequence repeat primer DVD(TC)8.5.
XX XX
XX KM Detection; polymorphism; perfect compound simple sequence repeat;
XX KM adaptor directed primer; genome; genetic; fingerprinting;
XX KM amplified fragment length polymorphism assay; microsatellite region;
XX KM genetic trait marking; germlasm comparisons; 5'-anchored; ss.
XX OS Synthetic.
XX PN W09617082-A2.
XX XX
XX PD 06-JUN-1996.
XX XX
XX PF 21-NOV-1995; 95WO-US015150.
XX PR 28-NOV-1994; 94US-00346456.
XX XX
XX PA (DUPO ) DU PONT DE NEMOURS & CO E I.
XX PI Morgante M, Vogel JM;
XX DR WPI; 1996-277795/28.
XX XX
XX PT Modified amplified fragment length polymorphism assay - for detection of
XX PT polymorphism esp. in microsatellite regions.
XX PS Example 1; Page 76; 173pp; English.
XX XX
XX CC Detecting polymorphisms between 2 nucleic acid samples, esp. in
XX CC microsatellite regions, comprises digesting the nucleic acid to generate
XX CC fragments, ligating adaptor segments to their ends, amplifying them using
XX CC primer directed amplification and comparing the prods. to detect
XX CC differences. The primers used in the amplification comprise a primer
XX CC consisting of a perfect cpd. simple sequence repeat (SSR), and an adaptor
XX CC directed primer, comprising a sequence complementary to an adaptor
XX CC segment. The present sequence is an example of a SSR primer, which is
XX CC flanked at its 5'-end by degenerate nucleotides. The method represents a
XX CC modified amplified fragment length polymorphism assay, which is partic.
XX CC useful for genome fingerprinting, i.e. for genetic trait marking and
XX CC germlasm comparisons
XX SQ Sequence 20 BP; 0 A; 8 C; 0 G; 9 T; 0 U; 3 Other;

Query Match 0.3%; Score 15.6; DB 1; Length 20;
Best Local Similarity 88.9%; Pred. No. 8.2e+02;
Matches 16; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1182 AGAAGAGAGAGAGAGA 1199
DB 20 AGAGAGAGAGAGAGAH 3

RESULT 647
AAQ37956/C
ID AAQ37956 standard; DNA; 22 BP.
XX AC AAQ37956;
XX XX
XX DT 25-MAR-2003 (revised)
XX DT 11-JUL-1993 (first entry)
XX DE Sequence of transcription factor (TF) YY1 mutant binding sequence at P5+1
XX DE position (P5+1) mt2.
XX KM Transcription factor: YY1; modulatory adeno-associated virus type 2;
XX KM Epstein-Barr virus; oncogene; ss.
XX OS Homo sapiens.

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XX PN W09304076-A1.
XX XX
XX PD 04-MAR-1993.
XX XX
XX PF 14-AUG-1992; 92WO-US006840.
XX PR 16-AUG-1991; 91US-00746485.
XX XX
XX PA (UYPR-) UNIV PRINCETON.
XX PI Shi Y, Seto E, Shenk T;
XX DR WPI; 1993-093929/11.
XX XX
XX PT Purified and isolated mammalian transcription factor YY1 - used to
XX PT modulate transcription in adeno-associated virus type 2- Epstein-Barr
XX PT viruses and oncogenes; useful in diagnosis and screening.
XX PS Example; Fig 5; 100pp; English.
XX XX
XX CC The cDNA of transcription factor (TF) YY1 (AAQ37948) was derived from
XX CC HeLa cells derived from cervical carcinoma from clone p14-1 or PY1 of
XX CC the D98/AH-2 library. TF YY1 has a mol. wt. of 68 kD and is capable of
XX CC binding to a sequence between -50 and -70 (P5-60 site) and to the
XX CC transcription initiation region of the promoter (P5+1 site) of an adeno-
XX CC associated virus (AAV). It represents transcription directed by a TATA
XX CC element plus initiator (Inr) sequence. It can mediate transcription
XX CC through an Inr sequence or element. The initiation site is of a lymphocyte
XX CC specific terminal deoxynucleotidyltransferase gene (rdtlnr) or human
XX CC leucocyte IFN gene (leif-J Inr). YY1 can effect latency of viruses. It is
XX CC a zinc finger protein and has a glycine rich sequence and an acidic
XX CC domain. Oligonucleotides contg. the P5-60 or P5+1 sequence, as well as
XX CC various mutant version of the two sequences (see AAQ37950-52, AAQ37954-
XX CC 56) were placed directly upstream of the TATA box in construct PT1 to
XX CC test the functions of these binding sites within transfected cells.
XX CC (Updated on 25-MAR-2003 to correct PN field.)
XX SQ Sequence 22 BP; 4 A; 4 C; 10 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.6; DB 1; Length 22;
Best Local Similarity 81.8%; Pred. No. 8.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 3026 CTCGCTGCTCTCTGGAGACCT 3047
DB 22 CCGCTTCGCACTGGAGACCT 1

RESULT 648
AAQ65892
ID AAQ65892 standard; DNA; 22 BP.
XX AC AAQ65892;
XX XX
XX DT 25-MAR-2003 (revised)
XX DT 22-DEC-1994 (first entry)
XX DE Type II procollagen PCR primer 83.
XX KM Type II procollagen; COL2A1; amplification; primer;
XX KM polymerase chain reaction; PCR; osteoarthritis; cartilage; ss.
XX OS Synthetic.
XX PN W09411532-A1.
XX PD 26-MAY-1994.
XX XX
XX PF 12-NOV-1993; 93WO-US010964.
XX PR 13-NOV-1992; 92US-00977284.
XX XX

```

PA (UYJB-) UNIV JEFFERSON THOMAS.
XX Prockop DJ, Ala-Kokko L, Williams CJ, Rytvanemi P, Baldwin C;
PI Hopkinson I, Ahmad NN;
XX WPI; 1994-183530/22.
XX
PT Detecting genetic pre-disposition to osteoarthritis - and other diseases
PT Involving mutation in cartilage protein genes, by amplification and
PI analysis of DNA and comparison with standards.
XX
XX Claim 18; Page 30; 112pp; English.
CC Claim 18 claims primers for use in detecting mutations in a mammalian
CC gene for a structural protein of cartilage comprising a sequence
CC identified in Table 1 (Page 18-31). Table 1 includes 179 primer sequences
CC (see A065728-065906). The following details are given for primer 83:
CC Alt. code: DH-75 Region/exon: 49 Direction: sense Primer position: 20047
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 22 BP; 8 A; 2 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.6; DB 1; Length 22;
Best Local Similarity 81.8%; Pred. No. 8.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2755 GTGAAACAGACATGAGCTCT 2776
DB 1 GAAGAAATAGACATGCTGTCT 22
|||||
|
RESULT 649
AAV02438
ID AAV02438 standard; DNA; 22 BP.
AC AAV02438;
XX
DT 06-APR-1998 (first entry)
XX
DE Human type ligand polypeptide PCR primer R1.
XX
KM G protein-coupled receptor; ligand binding; pharmaceutical; modulator;
KM pituitary; central nervous system; pancreas; prophylactic;
KM therapeutic agent; PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9724436-A2.
XX
PD 10-JUL-1997.
XX
PF 26-DEC-1996; 96WO-JP003821.
XX
PR 28-DEC-1995; 95JP-00343371.
PR 15-MAR-1996; 96JP-00059419.
PR 12-AUG-1996; 96JP-00211805.
PR 18-SEP-1996; 96JP-00246573.
XX
PA (TAKE) TAKEDA CHEM IND LTD.
XX
PI Hinuma S, Habata Y, Kawamata Y, Hoshiyama M, Fujii R, Fukusumi S;
PI Kitada C;
XX
DR WPI; 1997-363672/33.
XX
PT Ligand peptide for G protein-coupled receptor - acts by modulating
PT function in the central nervous system, pancreas and pituitary gland.
XX
XX Example 31; Page 133; 258pp; English.
PS
XX PCR primers AAV02438-V02440 are used to amplify a novel bioactive human
CC type ligand cDNA used in an assay to monitor ligand binding to the G

CC protein-coupled receptor protein. Pharmaceutical compositions containing
CC this ligand may be used as a pancreatic function modulator, a central
CC nervous system modulator or a pancreatic function modulator. This ligand
CC could have specific applications as a prophylactic or therapeutic agent
CC for dementia, depression, anxiety syndrome, schizophrenia, trauma, growth hormone
CC consciousness, anxiety syndrome, schizophrenia, trauma, growth hormone
CC secretory disorder, hyper- and polypnea, hypercholesterolemia,
CC hyperglycemia, hyperlipidemia, hyperproliferation, diabetes,
CC cancer, pancreatitis, renal disease, Turner's syndrome, neurosis, asthma,
CC rheumatoid arthritis, spinal injury, transient brain ischemia, epilepsy,
CC amyotrophic lateral sclerosis, acute myocardial infarction, infertility,
CC spinocerebellar degeneration, bone fracture, trauma, atopic dermatitis,
CC osteoporosis and/or oligosaccharide. Assays can also be developed to screen
CC compounds which are capable of altering the binding activity of the
CC ligand thus affecting activation of the G protein-coupled receptor
CC protein
XX
SQ Sequence 22 BP; 1 A; 6 C; 7 G; 8 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.6; DB 1; Length 22;
Best Local Similarity 81.8%; Pred. No. 8.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 3260 ACCTGGCTCTGTGCTTAAATGC 3281
DB 1 ACCTGGCTCTGTGCTTAAATGC 22
|||||
|
RESULT 650
AAK57086/c
ID AAK57086 standard; DNA; 22 BP.
AC AAK57086;
XX
DT 22-JUL-1999 (first entry)
XX
DE Human mutant KCNQ2 screening primer 13.
XX
KM KCNQ2; KCNQ3; human; murine; potassium channel; diagnosis; prognosis;
KM benign familial neonatal epilepsy; BFN; juvenile myoclonic epilepsy; JME;
KM Rolandic epilepsy; mutant; treatment; screening; epilepsy; detection.
KM gene therapy; drug screening; primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO921875-A1.
XX
PD 06-MAY-1999.
XX
PF 23-OCT-1998; 98WO-US022375.
XX
PR 24-OCT-1997; 97US-0063147P.
XX
PA (UTAH) UNIV UTAH RES FOUND.
XX
PI Singh NA, Leppert MF, Charlier C;
PI WPI; 1999-312938/26.
XX
DR Nucleic acid encoding potassium channels KCNQ2 and 3.
XX
PS Claim 63; Page 144; 195pp; English.
XX
XX This invention describes novel human and mouse potassium channel proteins
CC KCNQ2 and KCNQ3. Detecting mutations in sequences that encode KCNQ2 or
CC KCNQ3, or the loss of one copy of these genes, is used for diagnosis and
CC prognosis of benign familial neonatal epilepsy (BPN), juvenile myoclonic
CC epilepsy (JME) or Rolandic epilepsy (RE). Cells (or transgenic animals)
CC that express wild-type or mutant KCNQ2 or 3 (also the proteins themselves
CC in cell-free form) are used to screen for agents that can be used to
CC treat or prevent these forms of epilepsy. Fragments of the encoding
CC nucleic acids are used as probes or primers, either for detecting

CC mutations or for isolation of related sequences, while the complete
 CC sequences may be used in gene therapy to provide wild-type protein.
 CC Antibodies specific for mutant or wild-type proteins are used as
 CC diagnostic reagents and for drug screening. The KCMQ2 and 3 proteins are
 CC useful in rational design of drugs and therapeutically (in replacement
 CC therapies). The forms of epilepsy associated with mutations in KCMQ2 and
 CC 3 sequences can now be diagnosed early (before symptoms are manifest),
 CC and better treatment options will be available. AAX57074-X57139 are
 CC primers used in the method of the invention

SQ Sequence 22 BP; 4 A; 7 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 8.3e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 3989 CTGAGCCTGAGCTGTGGAAGC 4010
 DB 22 CTGCCATGAGCTGTGCAAGC 1

RESULT 651

AAV81254
 ID AAV81254 standard; DNA; 22 BP.

AAV81254;

10-MAR-1999 (first entry)

Human ligand polypeptide cDNA screening primer R1.

pituitary-derived ligand polypeptide; G-protein coupled orphan receptor;
 GPR10; UHR-1; modulator; pituitary; central nervous system; pancreas;
 tissue; screen; therapeutic; binding; senile dementia; ligand; murine;
 Alzheimer's disease; Parkinson's disease; Huntington's disease; drug;
 Creutzfeldt-Jakob disease; poisoning; schizophrenia; growth hormone;
 secretion; diabetes; cancer; rheumatoid arthritis; epilepsy; vasopressor;
 gene therapy; transgenic animal; murine; PCR primer; ss.

Synthetic.

Homo sapiens.

WO9849295-A1.

05-NOV-1998.

27-APR-1998; 98WO-JP001923.

28-APR-1997; 97JP-00109974.

(TAKEDA) TAKEDA CHEM IND LTD.

Hinuma S, Fukusumi S;

WPI; 1999-009423/01.

New polypeptide ligand for orphan G protein coupled receptors - used for
 treating disorders of central nervous system, pituitary and pancreas, and
 for drug screening.

Example 31; Page 127; 206pp; English.

The invention relates to a murine pituitary-derived ligand polypeptide
 which is a ligand for the G-protein coupled orphan receptor designated
 GPR10 (human) or UHR-1 (rat). Cells transformed with a vector containing
 the ligand polypeptide encoding DNA are used to produce a recombinant
 ligand polypeptide. The ligand polypeptide, and its fragments, modulate
 function of the pituitary, central nervous system, pancreas and other
 tissues and can be used to screen for agents that modulate binding of the
 polypeptide to the receptor; to quantify the amount of receptor in a
 sample and to raise antibodies. They may also be used therapeutically,
 e.g. to treat senile dementia; Alzheimer's, Parkinson's or Huntington's
 diseases; Creutzfeldt-Jakob disease; poisoning by heavy metals or drugs;

CC diabetes; schizophrenia; disorders of growth hormone secretion; cancer;
 CC rheumatoid arthritis; epilepsy and many others, also to improve post-
 CC operative nutritional status and as vasopressor. Transgenic animals
 CC carrying the ligand polypeptide encoding DNA or its mRNA are used to
 CC study the function of the polypeptide-expressing genes, as models of
 CC disease, for drug screening and as source of cell lines. The ligand
 CC polypeptide DNA is used as a source of probes and primers to identify
 CC related sequences; in receptor-binding assays; for production of Ab and
 CC antisera; in drug development; for gene therapy and to develop transgenic
 CC animals. PCR primers AAV81254-262 are used for screening of the cDNA
 CC encoding a human pituitary-derived ligand polypeptide

SQ Sequence 22 BP; 1 A; 6 C; 7 G; 8 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 8.3e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 3260 ACCTGACCTGTGTGCTTATGTC 3281
 DB 1 ACGTGACTTGTGTGCTGTGC 22

RESULT 652

AAX15531
 ID AAX15531 standard; DNA; 22 BP.

AAX15531;

06-MAY-1999 (first entry)

PCR primer R1 used to amplify rat type ligand cDNA.

G protein-coupled receptor; GPCR; hypovarianism; gonocyte cagogenesis;
 menopausal syndrome; euthyroid; hypometabolism; lactation; modulation;
 pituitary adenomatosis; brain tumour; emmenopathy; autoimmune disease;
 prolactinoma; infertility; impotence; amenorrhea; galactorrhea;
 acromegaly; Chlari-Frommel syndrome; Argon-z-del Castillo syndrome;
 Forbes-Albright syndrome; lymphoma; Sheehan syndrome; dysospermatia;
 contraceptive; placental function; choriocarcinoma; hydatid mole;
 abortion; unfertilized fetus; abnormal saccharometabolism;
 abnormal lipidmetabolism; oxytocia; prolactin secretion; PCR primer; ss.

Synthetic.

Rattus sp.

30-DEC-1998.

22-JUN-1998; 98WO-JP002765.

23-JUN-1997; 97JP-00165437.

(TAKEDA) TAKEDA CHEM IND LTD.

Hinuma S, Kawamata Y, Fujii R, Matsumoto H;

WPI; 1999-105614/09.
 Use of G protein-coupled receptor ligands - for modulating prolactin
 secretion or placental function, e.g. for treating menopausal syndrome,
 tumours, autoimmune disease or abnormal pregnancy.

Example 30; Page 103; 241pp; English.

PCR primers AAX15531-33 were used to amplify cDNA encoding a rat type
 ligand polypeptide. The specification describes an agent for modulating
 CC prolactin secretion which comprises a ligand polypeptide or a salt, for a
 CC G protein-coupled receptor (GPCR) protein. The agents for promoting
 CC prolactin secretion can be used for treating or preventing
 CC hypovarianism, gonocyte cagogenesis, menopausal syndrome, euthyroid or
 CC hypometabolism. They can be used for promoting lactation in a domestic

CC mammal and as an aphrodisiac. The agents for inhibiting prolactin
 CC secretion can be used for treating or preventing pituitary adenomatosis,
 CC brain tumour, emmenorrhoea, autoimmune disease, prolactinoma,
 CC infertility, impotence, amenorrhoea, galactorrhea, acromegaly, Chiari-
 CC I syndrome, Argonz-del Castell syndrome, Forbes-Albright syndrome,
 CC lymphoma, Sheehan syndrome or dyszoospermia. The inhibitory agents can
 CC also be used as contraceptives. The agents for modulating placental
 CC function can be used for treating or preventing chorionicarcoma, hydatid
 CC mole, abortion, uterine fetus, abnormal
 CC becharometabolism, abnormal lipidmetabolism or oxytocia
 CC
 XX Sequence 22 BP; 1 A; 6 C; 7 G; 8 T; 0 U; 0 Other;
 SQ
 Query Match 0.3%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 8.3e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 3260 ACCGCGCTCTGTGCTTAGTGC 3281
 DB 1 ACCTGGCTTCTGTGCTTAGTGC 22
 RESULT 653
 AAX36878/c
 ID AAX36878 standard; DNA; 22 BP.
 XX
 AC AAX36878;
 XX
 DT 14-JUL-1999 (first entry)
 XX
 DE Human XLIS gene fragment PCR primer 2.1 F.
 XX
 KW XLIS gene; human; detection; diagnosis; prenatal diagnosis; therapy;
 KW lissencephaly; LIS; agyria-pachygyria; subcortical laminar heterotopia;
 KW SCLH; cortical dysgenesis; cryptogenic epilepsy; neurological disorder;
 KW neurodegenerative disease; Alzheimer's disease; X-linked disorder;
 KW genetic counselling; PCR primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN BP918091-A1.
 XX
 PD 26-MAY-1999.
 XX
 PF 21-NOV-1997; 97BP-00402811.
 XX
 PR 21-NOV-1997; 97BP-00402811.
 XX
 PA (INRM) INSERM INST NAT SANTE & RECH MEDICALE.
 XX
 PI Chelly J, Kahn A, Des Portes V, Pinard J;
 XX
 DR WPI; 1999-290318/25.
 XX
 PT New gene and its gene product expressed in the brain, useful for
 PT diagnosing and treating disorders such as lissencephaly and subcortical
 PT laminar heterotopia.
 XX
 PS Claim 9; Page 46; 71pp; English.
 XX
 CC This sequence is a primer for the human XLIS gene of the invention. The
 CC XLIS fragments may be used to detect abnormalities in the expression of
 CC the XLIS gene transcripts or to compare their sequence with that of the
 CC XLIS transcripts from patients for in vitro especially prenatal diagnosis
 CC of lissencephaly (LIS) (or agyria-pachygyria), subcortical laminar
 CC heterotopia (SCLH), cortical dysgenesis, cryptogenic epilepsies or
 CC neurodegenerative diseases such as Alzheimer's disease. These disorders
 CC mainly affect females as the XLIS gene is X-linked. The XLIS fragments
 CC may also be used to administer to patients to prevent or treat the above
 CC disorders and may be used as a tool in genetic counselling.
 CC Oligonucleotides which bind to the fragments may be used to amplify the
 CC XLIS gene from a sample for comparison to normal samples in the in vitro

CC diagnosis regime. This may also be performed by amplifying XLIS cDNA from
 CC the mRNA in the sample. Antibodies to XLIS may be used to detect XLIS in
 CC a biological sample or can be administered to patients to prevent or
 CC treat the above disorders. They may also be used to purify XLIS from a
 CC biological sample. XLIS may also be administered to patients to prevent
 CC or treat the above neurological disorders. In addition XLIS may be used
 CC as a marker of neuronal cells at an early stage of development; its
 CC discovery increases understanding of both the neuronal movement which
 CC leads to development of the cortical region of the brain and of the
 CC pathogenesis of the group of neuronal disorders mentioned above
 CC
 XX Sequence 22 BP; 0 A; 10 C; 0 G; 12 T; 0 U; 0 Other;
 SQ
 Query Match 0.3%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 8.3e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 4770 GGAGAAAGGCGCAAAAGGGA 4791
 DB 22 GGAGAAAGGCAAAAGAGGGA 1
 RESULT 654
 AAZ36053/c
 ID AAZ36053 standard; DNA; 22 BP.
 XX
 AC AAZ36053;
 XX
 DT 28-JAN-2000 (first entry)
 XX
 DE Reverse PCR primer for MLC2a gene amplification.
 XX
 KW PCR primer; reverse transcriptase polymerase chain reaction; RT-PCR;
 KW gene expression; treatment; prognosis; diagnosis; ss; MLC2a gene.
 XX
 OS Synthetic.
 OS Mus sp.
 XX
 PN M09954510-A2.
 XX
 PD 28-OCT-1999.
 XX
 PF 23-APR-1999; 99MO-US008968.
 XX
 PR 23-APR-1998; 98US-00065673.
 XX
 PA (GETH) GENENTECH INC.
 XX
 PI Lowe DG, Schoenfeld JR;
 XX
 DR WPI; 2000-013272/01.
 XX
 PT Quantitative analysis of gene expression using RT-PCR assays.
 XX
 PS Example 1; Page 20; 46pp; English.
 XX
 CC PCR primers AAZ36052-236053 are used to amplify the mouse MLC2a gene. The
 CC primers and the PCR product are used in the method of the invention which
 CC relates to a novel quantitative reverse transcriptase polymerase chain
 CC reaction (RT-PCR) assay for quantitative gene expression. The method is
 CC used for determining a quantitative measure of the expression of a gene
 CC of interest in a biological sample by determining a normalised RNA
 CC prevalent for the gene of interest. The invention also relates to a
 CC method for determining the effect of a treatment on a quantitative
 CC measure of the expression of a gene of interest, or of a panel of genes
 CC of interest, in a sample by determining a normalised RNA equivalent for
 CC the gene of interest in a first untreated sample and a second treated
 CC sample. The methods are used for quantitative gene expression, where
 CC determination of changes in gene expression provides a measure of the
 CC biological response to a treatment or drug. The method have uses in
 CC prognostic and diagnostic applications
 CC
 XX Sequence 22 BP; 5 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
 SQ

```
Query Match 0.3%; Score 15.6; DB 1; Length 22;
Best Local Similarity 81.8%; Pred. No. 8.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 4733 TGAAGAGACCCATCTCTCAGCT 4754
DB 22 TGAAGAGACCTATATCCAGCT 1
|||||
|||||

RESULT 655
AAC70378
ID AAC70378 standard; DNA; 22 BP.
AC AAC70378;
XX
XX
XX 09-FEB-2001 (first entry)
DE Single nucleotide polymorphism PCR primer #139.
XX
XX
XX Single nucleotide polymorphism; SNP; human; genetic disease;
KM disease susceptibility; cardiovascular system; endocrine system;
KW neurological system; forensic testing; paternity testing; PCR primer; ss.
XX
XX Homo sapiens.
OS
XX WO200058519-A2.
XX
XX 05-OCT-2000.
XX
XX 30-MAR-2000; 2000MO-US008440.
XX
XX 31-MAR-1999; 99US-0127248P.
XX
XX
XX (MHED) WHITEHEAD INST BIOMEDICAL RES.
PA (AFPR-) AFPRMTRIX INC.
XX
XX Altschuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
PI Lipshutz RJ, Patil N, Sklar P;
XX
XX WPI; 2000-611722/58.
XX
XX Nucleic acid selected from one of 106 genes comprising single nucleotide
PT polymorphisms, allele-specific oligonucleotides to the genes are useful
PR for phenotypic correlations, forensics, paternity testing, medicine and
XX genetic analysis.
XX
XX Claim 8; Fig 5; 214pp; English.
XX
XX The present invention is concerned with a number of human single
CC nucleotide polymorphisms (SNPs) which the inventors identified in human
CC genes. These SNPs can be used in disease diagnosis and prediction of an
CC individual's susceptibility to disease, in forensic and paternity testing
CC and in genetic mapping. In particular, the SNPs of the invention can be
CC used to diagnose susceptibility to diseases of the cardiovascular,
CC endocrine and neurological systems, such as coronary artery disease,
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC diseases
XX
SQ Sequence 22 BP; 8 A; 3 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.6; DB 1; Length 22;
Best Local Similarity 81.8%; Pred. No. 8.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 4533 TGTGACCACTATCGAGAGCAG 4554
DB 1 TTTGACCACTATGACAGAG 22
|||||
|||||

RESULT 656
AAF60520
ID AAF60520 standard; DNA; 22 BP.
```

```
XX
XX AAF60520;
AC
XX 27-APR-2001 (first entry)
DT
XX
XX Human PAC_1R PCR primer #6.
DE
XX
XX Human; PAC_1 receptor; transgenic organism; PACAP; brain; stroke; memory;
KM pituitary adenylate cyclase-activating polypeptide receptor; nociception;
KM PACAP type 1 receptor; PAC_1R; neuropeptide; cerebrovascular disease;
KW cardiovascular disease; leishmaniasis; immunosuppressive disorder;
XX learning function; PCR primer; ss.
XX
XX Homo sapiens.
OS
XX WO200107478-A1.
XX
XX 01-FEB-2001.
XX
XX 25-APR-2000; 2000MO-GB001586.
XX
XX 23-APR-1999; 99GB-00009446.
XX
XX (MED-) MEDICAL RES COUNCIL.
PA
XX
XX Shen S, Harmar AJ;
PI
XX
XX WPI; 2001-159705/16.
XX
XX
XX New transgenic organism, useful for studying regulation of human P1-
PT derived artificial chromosome (PAC) 1R gene expression, comprises a PAC
PT vector or pituitary adenylate cyclase-activating polypeptide receptor
XX gene.
XX
XX Example 1; Page 41; 83pp; English.
XX
XX The present invention relates to a transgenic organism comprising a P1-
CC derived artificial chromosome (PAC) vector, which in turn comprises a
CC pituitary adenylate cyclase-activating polypeptide (PACAP) receptor
CC (PACR) gene. The present sequence is a PCR primer for human PACAP type 1
CC receptor (PAC_1R). PACAP is a neuropeptide which is widely expressed in
CC the brain, and in various peripheral organs. PAC_1R is selective for
CC PACAP and is expressed at high levels in the brain. PAC_1R is useful for
CC preparing a medicament in the treatment and/or modulation of disturbances
CC in stroke and other cerebrovascular diseases, cardiovascular diseases,
CC leishmaniasis, immunosuppressive disorders, nociception (reaction to pain
CC sensation) and learning and memory functions
XX
XX Sequence 22 BP; 3 A; 6 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.6; DB 1; Length 22;
Best Local Similarity 81.8%; Pred. No. 8.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 4749 TCACCTGATTATGAACTCTGG 4770
DB 1 TCACCTGCTTGTGAACTCTGG 22
|||||
|||||

RESULT 657
AAH45105
ID AAH45105 standard; DNA; 22 BP.
AC AAH45105;
XX
XX 06-SEP-2001 (first entry)
DT
XX
XX Beta-amyloid precursor protein, APP, coding sequence 5' PCR primer.
DE
XX
XX Disease detection; age-related disease; Alzheimer's disease;
KM Down's syndrome; cancer; neurodegenerative disease; Parkinson's disease;
KW amyotrophic lateral sclerosis; Huntington's disease; Parkinson's disease;
KW spinocerebellar ataxia-3; multiple sclerosis; diabetes mellitus type II;
```


PD 11-JUL-2002.
 XX
 PF 14-DEC-2001; 2001WO-US048458.
 XX
 PR 14-DEC-2000; 2000US-0255534P.
 XX
 PA (COLE-) COLEY PHARM GROUP INC.
 XX
 PI Bratzler RL;
 XX
 DR WPI; 2002-566690/60.
 XX
 PT Inhibiting angiogenesis in a subject, involves administering at least one
 PT antiangiogenic nucleic acid molecule to the subject.
 XX
 PS Claim 2; Page 20; 276pp; English.
 XX
 CC The invention relates to inhibiting angiogenesis in a subject, comprising
 CC administering at least one antiangiogenic nucleic acid molecule. Also
 CC included is a kit comprising a first container housing the antiangiogenic
 CC nucleic acids, and instructions for administering them to a subject
 CC having a condition characterised by unwanted angiogenesis. The method is
 CC useful for inhibiting angiogenesis associated with solid tumour growth,
 CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
 CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
 CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
 CC rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
 CC neovascularisation, telangiectasia, haemophilic joints, angiodioma,
 CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
 CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
 CC acid of the invention
 XX
 SQ Sequence 22 BP; 0 A; 0 C; 2 G; 20 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 8.3e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 5404 AAAAAAGAAAAATGAAATATA 5425
 Db 22 AAAAAACAAAAAAGAAAAA 1
 RESULT 660
 ABQ93268/c
 ID ABQ93268 standard; DNA; 22 BP.
 XX
 AC ABQ93268;
 XX
 DT 29-AUG-2003 (revised)
 DT 21-OCT-2002 (first entry)
 XX
 DE T. tauschii/wheat D genome microsatellite cfa2103 right PCR primer.
 XX
 KW Microsatellite marker; wheat; D genome; mapping; genotyping;
 KW polymorphism; phenotypic trait; QTL; quantitative trait locus;
 KW disease-associated gene; development factor; quality factor;
 KW resistance factor; wheat product; identification; detection;
 KW genetically modified wheat; PCR; primer; ss.
 XX
 OS Aegilops tauschii.
 OS Triticum aestivum.
 XX
 PN EP1217079-A1.
 PD 26-JUN-2002.
 XX
 PF 22-DEC-2000; 2000EP-00403659.
 XX
 PR 22-DEC-2000; 2000EP-00403659.
 XX
 PA (INRG) INRA INST NAT RECH AGRONOMIQUE.
 XX

PI Bernard M, Sourdilile P, Guyomarch H;
 XX
 DR WPI; 2002-550410/59.
 XX
 PT Map of wheat D genome comprising the genome location of a microsatellite
 PT marker, useful for e.g. identifying genes responsible for a desired
 PT phenotypic trait, especially quantitative trait loci in wheat, and
 PT diseases.
 XX
 PS Claim 4; Page 10; 105pp; English.
 XX
 CC The invention relates to a map of the bread wheat D genome comprising the
 CC genome location of a microsatellite marker selected from a group of 185
 CC such markers (ABQ92733-ABQ92917). The invention also encompasses the use
 CC of left (ABQ92918-ABQ93102) and right (ABQ93103-ABQ93287) primers to
 CC amplify and detect the microsatellite markers, and to identify genes
 CC responsible for a phenotypic trait of interest in wheat. Wheat is an
 CC allohexaploid species consisting of 3 diploid genomes designated A, B and
 CC D, resulting from two successive intercrossings involving at least three
 CC different species. The D genome is thought to have been introduced in the
 CC most recent intercrossing, between the amphiploid AABB and Triticum
 CC tauschii (TD), probably involving only a limited number of genotypes of
 CC both species. Due to its polyploid genome, the large size of its genome,
 CC and its low level of polymorphism, the genetic mapping of wheat has to
 CC date been difficult. Microsatellites are tandemly repeated sequences
 CC between one and six nucleotides long, and are very polymorphic in length,
 CC mainly due to polymerase slippage during replication. This high degree of
 CC polymorphism makes them especially suitable for the genetic mapping of
 CC species which show little intraspecific polymorphism, such as wheat. In
 CC addition, microsatellites are codominant, and exhibit Mendelian
 CC inheritance. The 185 microsatellite markers of the invention are
 CC developed from the ancestral diploid donor species Triticum tauschii and
 CC map to the wheat D genome, which is less polymorphic than the A or B
 CC genomes. These microsatellite markers thus help to overcome some of the
 CC problems associated with the genetic mapping of wheat. The wheat D genome
 CC map and the microsatellite markers and associated primers of the
 CC invention are useful for identifying genes responsible for a phenotypic
 CC trait of interest, most notably QTLs (quantitative trait loci). In
 CC particular they may be used for analysing genes and alleles implicated in
 CC disease and for identifying development factors, quality factors and
 CC factors conferring resistance to pathogens and xenobiotics. The
 CC microsatellite markers, and associated primers may be also be used in
 CC mapping and genotyping diploid and polyploid species of Triticum,
 CC particularly Aegilops, Triticum monococcum, Triticum durum, Triticum
 CC aestivum, or related species; for identifying cultivars and hybrids of
 CC Triticum and related species; to assess whether or not a product
 CC comprises wheat or a related species; and to assess whether or not a
 CC product comprises genetically modified wheat. The present sequence
 CC represents a specifically claimed Triticum tauschii/wheat genome D
 CC microsatellite marker right PCR primer of the invention. (Updated on 29-
 CC AUG-2003 to standardise OS field)
 XX
 SQ Sequence 22 BP; 2 A; 8 C; 2 G; 10 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.6; DB 1; Length 22;
 Best Local Similarity 81.8%; Pred. No. 8.3e+02;
 Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 2115 GCAGCAGATGATGACGAGAGAA 2136
 Db 22 GCAGCTAATGATGAGAGAGAA 1
 RESULT 661
 ABV77172
 ID ABV77172 standard; DNA; 22 BP.
 XX
 AC ABV77172;
 XX
 DT 27-OCT-2003 (revised)
 DT 28-MAR-2003 (first entry)
 XX
 PA Primer and probe for foot and mouth disease virus (FMDV) 3D gene.
 DE

```

XX FMDV; 3D gene; RNA polymerase gene; FMDV infection; FMDV serotype;
KM FMDV Asia; FMDV A; FMDV C; FMDV O; FMDV Sat 1; FMDV Sat 2; FMDV Sat 3;
KM primer; probe; ss.
XX Foot-and-mouth disease virus.
XX MO200295074-A1.
PN
XX
PD 28-NOV-2002.
XX
PF 20-MAY-2002; 2002MO-US015826.
XX
PR 18-MAY-2001; 2001US-0291636P.
XX
PA (TETR-) TETRACORE INC.
XX
PI Callahan JD, Nelson WM, Mangold BL,
XX
PI MPI; 2003-129441/12.
XX
DR
XX MPI; 2003-129441/12.
XX
PT Novel isolated nucleic acid useful for detecting foot and mouth disease
PT virus infection in patient, and for detecting infection caused by
PT serotypes of the virus.
XX
PS Claim 16; Page 8; 43pp; English.
XX
XX ABV77170-83 represent primers and probes for foot and mouth disease virus
CC (FMDV) 3D gene. A highly conserved area within the RNA polymerase gene is
CC referred to as 3D. The probes and primers are useful for detecting a FMDV
CC infection in a patient or for detecting an infection caused by any of
CC several serotypes of FMDV. The primers and probes are especially useful
CC for identifying FMDV infection caused by any of the FMDV serotypes such
CC as Asia, A, C, O, Sat 1, Sat 2 or Sat 3. (Updated on 27-OCT-2003 to
CC standardise OS field)
CC
SQ Sequence 22 BP; 5 A; 3 C; 5 G; 9 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.6; DB 1; Length 22;
Best Local Similarity 81.8%; Pred. No. 8.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 382 CTGGGATTTTAAACTGGGTT 403
DB 1 CTGGGATTTTAAACTGGGAT 22

RESULT 662
ADA00879/c
ID ADA00879 standard; DNA; 22 BP.
XX
AC ADA00879;
XX
XX 06-NOV-2003 (first entry)
XX
DE Mouse ESDN RT-PCR primer #1.
XX
XX ss; RT-PCR; type-I transmembrane protein;
XX endothelial and smooth muscle cell-derived neuropilin-like molecule;
KM ESDN; arterial sclerosis; restenosis;
KM percutaneous transmembrane coronary angioplasty; PTCA; immune deficiency;
KM immune disorder; tumour metastasis; diabetic retinopathy; mouse;
KM reverse transcriptase; primer.
XX
XX Mus musculus.
XX
XX US2003129697-A1.
XX
XX 10-JUL-2003.
XX
XX 10-JUL-2002; 2002US-00191436.
XX
XX 27-DEC-2001; 2001JP-00397725.

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XX (ONOY ) ONO PHARM CO LTD.
PA
XX
XX Honjo T, Tashiro K, Kobuke K;
PI
XX
XX MPI; 2003-635851/60.
DR
XX
XX
PT New human, mouse or rat Endothelial and Smooth muscle cell Derived
PT Neuropilin-like molecule (ESDN) polypeptides or genes, useful for
PT treating arterial sclerosis or restenosis after percutaneous
PT transmembrane coronary angioplasty.
XX
XX Example 2; Page 7; 38pp; English.
XX
XX The invention relates to a substantially purified form of a type-I
CC transmembrane proteins, designated endothelial and smooth muscle cell-
CC derived neuropilin-like molecule (ESDN). The ESDN polypeptide, cDNA,
CC antibody or pharmaceutical composition is useful for treating arterial
CC sclerosis, or restenosis after percutaneous transmembrane coronary
CC angioplasty (PTCA). The ESDN polypeptide is also useful for screening
CC reagents with antagonistic or agonistic activity. The antibody may be
CC used for measuring the quantity of the ESDN polypeptide. The polypeptide
CC is also useful for treating or preventing immune deficiencies and
CC disorders, tumour metastases and diabetic retinopathy. The present
CC sequence represents the mouse endothelial and smooth muscle cell-derived
CC neuropilin-like molecule, ESDN, reverse transcriptase (RT)-PCR primer #1.
CC
SQ Sequence 22 BP; 2 A; 12 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.6; DB 1; Length 22;
Best Local Similarity 81.8%; Pred. No. 8.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 570 GAAGAGGAGGAGCTGAAGAG 591
DB 22 GAAGAGGAGGAGGTTGAGCAG 1

RESULT 663
ACD99369/c
ID ACD99369 standard; DNA; 22 BP.
XX
XX ACD99369;
XX
XX 25-SEP-2003 (first entry)
XX
XX
XX Immunostimulatory nucleic acid #55.
DE
XX
XX Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
KM antitumor; gene therapy; vaccine; non-allergic inflammatory disease;
KM psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
KM inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
XX
XX Synthetic.
XX
XX US2003050268-A1.
XX
XX 13-MAR-2003.
XX
XX 29-MAR-2002; 2002US-00112653.
XX
XX 29-MAR-2001; 2001US-0279642P.
XX
XX (KRIE/) KRIEG A M.
XX (BERG/) BERG D J.
XX
XX Krieg AM, Berg DJ;
XX
XX MPI; 2003-521815/49.
XX
XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
PT disease by administering an immunostimulatory nucleic acid.

```

```
XX XX Disclosure; Page 10; 229pp; English.
XX PS
CC CC The invention describes a method of treating non-allergic inflammatory
CC disease comprising administering to a subject having or at risk of
CC developing a non-allergic inflammatory disease an immunostimulatory
CC nucleic acid for prevention or treatment of the disease. The method is
CC useful for treating non-allergic inflammatory diseases, such as
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
CC This sequence represents an immunostimulatory nucleic acid
XX XX
SQ Sequence 22 BP; 0 A; 0 C; 2 G; 20 T; 0 U; 0 Other;

Query Match      0.3%; Score 15.6; DB 1; Length 22;
Best Local Similarity 81.8%; Pred. No. 8.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      5404 AAAAGAGAAAATGAAATGAA 5425
      ||||| ||||| ||||| |||||
Db      22 AAAACCAAAAAACAAAAAAA 1

RESULT 664
ADB36438/C
ID ADB36438 standard; DNA; 22 BP.
XX
AC ADB36438;
XX
DT 04-DEC-2003 (first entry)
XX
DE Immunostimulatory nucleic acid #52.
XX
KW de; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX hypo-responsive subject; immunostimulatory.
OS Synthetic.
XX
PN US2003087848-A1.
XX
PD 08-MAY-2003.
XX
PF 02-FEB-2001; 2001US-00764479.
XX
PR 03-FEB-2000; 2000US-0179991P.
XX
PA (BRAT/) BRATZLER R L.
PA (PETER/) PETERSEN D M.
PA (FOUR/) FOURON Y.
XX
PI Bratzler RL, Petersen DW, Fouron Y;
XX
DR WPI; 2003-657977/62.
XX
PT Treating and/or preventing allergy or asthma using an immunostimulatory
PT nucleic acid alone or in combination with an asthma/allergy medicament.
XX
PS Claim 10; Page 6; 221pp; English.
XX
CC The invention relates to a method of treating or preventing allergy or
CC asthma which comprises administering to a subject a poly-G nucleic acid
CC in an aerosol formulation. The methods and compositions of the present
CC invention are useful for diagnosing and/or treating asthma and allergy
CC especially in a hypo-responsive subject. The present sequence represents
CC an immunostimulatory nucleic acid of the invention.
XX
SQ Sequence 22 BP; 0 A; 0 C; 2 G; 20 T; 0 U; 0 Other;

Query Match      0.3%; Score 15.6; DB 1; Length 22;
Best Local Similarity 81.8%; Pred. No. 8.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      5404 AAAAGAGAAAATGAAATGAA 5425
```

```
Db      22 AAAACCAAAAAACAAAAAAA 1
      ||||| ||||| ||||| |||||

RESULT 665
ADC84386
ID ADC84386 standard; DNA; 22 BP.
XX
AC ADC84386;
XX
DT 01-JAN-2004 (first entry)
XX
DE Human papillomavirus type MM8 detection oligonucleotide #9.
XX
KW probe; human papilloma virus; HPV; detection; identification; ss.
XX
OS Human papillomavirus.
XX
PN EP1302550-A1.
XX
PD 16-APR-2003.
XX
PF 10-OCT-2001; 2001EP-00123379.
XX
PR 10-OCT-2001; 2001EP-00123379.
XX
PA (KING-) KING CAR FOOD IND CO LTD.
XX
PI Lin C, Lin R, You C, Huang H, Lee B, Lee H, Lin Y, Fan C;
PI Hsu H, Shih C, Yeh C, Kao Y, Pan C, Chan P;
XX
DR WPI; 2003-432398/41.
XX
PT Detector for identifying human papilloma virus subtypes, comprises
PT carrier having two parts carrying first and second oligonucleotides that
PT respectively hybridize with DNA contained in first and second subtypes of
PT the virus.
XX
PS Claim 4; SEQ ID NO 616; 221pp; English.
XX
CC The invention comprises oligonucleotides for detecting and identifying
CC subtypes of human papilloma virus (HPV) contained in a sample. The
CC oligonucleotides of the invention are useful for simultaneously detecting
CC and identifying subtypes of HPVs. The present DNA sequence represents an
CC HPV detection oligonucleotide of the invention.
XX
SQ Sequence 22 BP; 2 A; 10 C; 9 G; 1 T; 0 U; 0 Other;

Query Match      0.3%; Score 15.6; DB 1; Length 22;
Best Local Similarity 81.8%; Pred. No. 8.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY      5076 GGTCGCCACGACGACGACCT 5097
      ||||| ||||| ||||| |||||
Db      1 GGAGGCCGCGCGCCGACGCT 22

RESULT 666
ADF44288
ID ADF44288 standard; DNA; 22 BP.
XX
AC ADF44288;
XX
DT 12-FEB-2004 (first entry)
XX
DE HPV MM8 detecting probe MM809.
XX
KW detection; human papillomavirus; HPV subtype; probe; ss.
XX
OS Human papillomavirus.
XX
PN JP2002360271-A.
XX
```

```
PD 17-DEC-2002.
XX
XX 28-NOV-2001; 2001JP-00362595.
XX
XX 04-MAY-2001; 2001TW-00110785.
XX
XX (KING-) KING CAR FOOD IND CO LTD.
XX
XX WPI; 2003-600935/57.
XX
XX A detecting apparatus and a detecting method for identifying the subtypes
PT of many species of human papilloma viruses at the same time and a
PT composition for the detection.
XX
XX Claim 1; SEQ ID NO 645; 166bp; Japanese.
XX
XX This invention describes a novel detecting apparatus for identifying the
CC subtypes of human papillomaviruses (HPV) contained in a sample which
CC comprises a carrier which can load sample, a first oligonucleotide loaded
CC on first part of the carrier and a second oligonucleotide loaded on
CC second part of the carrier, in which first and second oligonucleotides
CC hybridize with the DNA of the first and the second HPV subtype and can
CC identify HPV subtype contained in sample at the same time. ADP43644-
CC ADP44289 represent oligonucleotide probes used in the method of the
CC invention.
XX
XX Sequence 22 BP; 2 A; 10 C; 9 G; 1 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.3%; Score 15.6; DB 1; Length 22;
XX Best Local Similarity 81.8%; Pred. No. 8.3e+02;
XX Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 5076 GGTGGCAGCAGCGCAAGCCT 5097
DB 1 GGGGGCCGCGCGCCAGCCT 22
RESULT 667
ADG76036/c
ID ADG76036 standard; DNA; 22 BP.
XX
XX ADG76036;
XX
XX 11-MAR-2004 (first entry)
XX
XX Non-CpG DNA oligonucleotide 37.
XX
XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
XX proliferation; differentiation; cytokine; antibody production; B-cell;
XX plasmacytoid dendritic cell; immunomodulator; gene therapy;
XX chronic myelogenous leukemia; melanoma; Kaposi's sarcoma;
XX renal cell carcinoma.
XX
XX Synthetic.
XX
XX WO2003101375-A2.
XX
XX 11-DEC-2003.
XX
XX 30-MAY-2003; 2003WO-EP005691.
XX
XX 30-MAY-2002; 2002CA-02388049.
XX
XX (IMMU-) IMMUNOTECH SA.
XX
XX Lopez RA;
XX
XX WPI; 2004-053333/05.
XX
XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
PT acid sequence motif, useful for inducing B-cell activation, treating,
PT preventing or ameliorating immune system disorder or tumoral disease e.g.
PT melanoma.
```

```
XX
XX Example 17; Page 81; 139pp; English.
XX
XX This invention relates to novel immunostimulatory oligonucleotides that
CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
CC oligonucleotides (without a CpG motif), which can stimulate an immune
CC response in animals of the order of primate, including humans. The immune
CC response is characterised by the proliferation, differentiation, cytokine
CC and antibody production in B-cells, as well as cell differentiation and
CC cytokine production in plasmacytoid dendritic cells. The present
CC invention describes immunomodulator compositions that also comprise an
CC antigen selected from, for example, viruses, bacteria, parasites, tumour
CC cells and glycolipids. As such, these DNA oligos can be used in gene
CC therapy for inducing B-cell activation, treating, preventing or
CC ameliorating an immune system disorder or a tumoral disease including
CC chronic myelogenous leukemia, melanoma, Kaposi's sarcoma, and renal cell
CC carcinoma. This oligonucleotide sequence is a non-CpG DNA oligo of the
CC invention.
XX
XX Sequence 22 BP; 0 A; 0 C; 2 G; 20 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.3%; Score 15.6; DB 1; Length 22;
XX Best Local Similarity 81.8%; Pred. No. 8.3e+02;
XX Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 5404 AAAAGCAAAATGAAATATA 5425
DB 22 AAAAGCAAAATGAAATATA 1
RESULT 668
ADG76002/c
ID ADG76002 standard; DNA; 22 BP.
XX
XX ADG76002;
XX
XX 11-MAR-2004 (first entry)
XX
XX Non-CpG DNA oligonucleotide 3.
XX
XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
XX proliferation; differentiation; cytokine; antibody production; B-cell;
XX plasmacytoid dendritic cell; immunomodulator; gene therapy;
XX chronic myelogenous leukemia; melanoma; Kaposi's sarcoma;
XX renal cell carcinoma.
XX
XX Synthetic.
XX
XX WO2003101375-A2.
XX
XX 11-DEC-2003.
XX
XX 30-MAY-2003; 2003WO-EP005691.
XX
XX 30-MAY-2002; 2002CA-02388049.
XX
XX (IMMU-) IMMUNOTECH SA.
XX
XX Lopez RA;
XX
XX WPI; 2004-053333/05.
XX
XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
PT acid sequence motif, useful for inducing B-cell activation, treating,
PT preventing or ameliorating immune system disorder or tumoral disease e.g.
PT melanoma.
XX
XX Example 17; Page 80; 139pp; English.
XX
XX This invention relates to novel immunostimulatory oligonucleotides that
CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
CC oligonucleotides (without a CpG motif), which can stimulate an immune
CC response in animals of the order of primate, including humans. The immune
```

CC response is characterised by the proliferation, differentiation, cytokine
CC and antibody production in B-cells, as well as cell differentiation and
CC cytokine production in plasmacytoid dendritic cells. The present
CC invention describes immunomodulator compositions that also comprise an
CC antigen selected from, for example, viruses, bacteria, parasites, tumour
CC cells and glycolipids. As such, these DNA oligos can be used in gene
CC therapy for inducing B-cell activation, treating, preventing or
CC ameliorating an immune system disorder or a tumoural disease including
CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
CC carcinoma. This oligonucleotide sequence is a non-CpG DNA oligo of the
CC invention.

XX
SQ Sequence 22 BP, 0 A, 0 C, 2 G, 20 T, 0 U, 0 Other;

Query Match 0.3%; Score 15.6; DB 1; Length 22;
Best Local Similarity 81.8%; Pred. No. 8.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 5404 AAAAGAGAAAATGAAAATGAAA 5425
DB 22 AAAAGACAAAAAACAATAAAAA 1

RESULT 669
ADH70416/c
ID ADH70416 standard; DNA; 22 BP.

AC ADH70416;
XX
XX
DT 25-MAR-2004 (first entry)

XX Human Vbeta gene repeat sequence #206.

XX human; T-cell associated disease; Vbeta; autoimmune disease;
KM degenerative nervous system disease; graft versus host disease;
KM hypersensitivity disease; infectious disease; neoplastic disease;
KM Addison's disease; atrophic gastritis;
KM degenerative nervous system disease; multiple sclerosis;
KM Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
KM allergy; type II hypersensitivity; Goodpasture's syndrome;
KM type IV hypersensitivity; leprosy; infectious disease; viral infection;
KM HIV; fungal infection; candida; parasitic infection; schistosoma;
KM filaria; bacterial infection; Mycobacterium; neoplastic disease;
KM lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
KM breast cancer; ds.

XX Homo sapiens.
OS
XX US2002150891-A1.
PN
XX 17-OCT-2002.
PD
XX 05-MAR-1999; 99US-00263959.
PF
XX 19-SEP-1994; 94US-00309335.
PR 19-SEP-1995; 95US-00531241.
XX
XX (HOOD/) HOOD L. E.
PA (ROME/) ROWEN L.
XX
XX Hood LE, Rowen L;
PI
XX WPI; 2004-059052/06.
DR
XX
XX Kit for diagnosing and treating T-cell associated diseases e.g.
PT autoimmune, degenerative nervous system and infectious disease, comprises
PT nucleic acid primers specifically priming and allowing amplification of a
PT Vbeta gene.
XX
XX Disclosure; SEQ ID NO 610; 164bp; English.
PS
XX The invention relates to a kit for diagnosing and treating T-cell
CC associated diseases which comprises a panel of nucleic acid primers

CC specifically priming and allowing amplification of each Vbeta gene,
CC VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
CC rejection and diagnosing and treating T-cell associated diseases
CC including autoimmune diseases, degenerative nervous system diseases,
CC graft versus host disease, hypersensitivity diseases, infectious diseases
CC and neoplastic diseases. Autoimmune diseases include Addison's disease,
CC atrophic gastritis. Degenerative nervous system diseases include multiple
CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include type
CC I hypersensitivities such as contact with allergens that lead to
CC allergies, type II hypersensitivities such as those present in
CC Goodpasture's syndrome and type IV hypersensitivities such as those
CC manifested in leprosy. Infectious diseases include viral infections
CC caused by viruses such as HIV, fungal infections such as those caused by
CC the yeast genus Candida, parasitic infections such as those caused by
CC schistosomes, filaria and bacterial infections such as those caused by
CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
CC such as leukaemias, lymphomas and cancers such as cancer of the brain,
CC breast. The present sequence represents a Vbeta gene repeat sequence.

XX
SQ Sequence 22 BP, 0 A, 7 C, 0 G, 15 T, 0 U, 0 Other;

Query Match 0.3%; Score 15.6; DB 1; Length 22;
Best Local Similarity 81.8%; Pred. No. 8.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1184 AAAAGAGAGAGAGAAATCAGA 1205
DB 22 AAAAGAGAGAGAGAGAGAGAGAA 1

RESULT 670
ADJ78305/c
ID ADJ78305 standard; DNA; 22 BP.

XX
XX ADJ78305;
AC
XX 06-MAY-2004 (first entry)
DT
XX
XX Mouse perillipin reverse PCR primer SEQ ID NO:13.

XX perillipin; perillipin inhibitor; antisense oligonucleotide; antidiabetic;
KM anorectic; antiarteriosclerotic; cardiac; metabolic disorder; diabetes;
KM obesity; atherosclerosis; mouse; PCR; primer; ss.

XX Mus musculus.
OS
XX
XX MO2004012745-A1.
PN
XX 12-FEB-2004.
PD
XX 30-JUL-2003; 2003WO-US023760.
PF
XX 06-AUG-2002; 2002US-00213796.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Bhanot S, Freier SM;
PI
XX WPI; 2004-157008/15.
DR
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acids encoding perillipin, useful for treating a metabolic
PT disorder e.g. obesity, diabetes or atherosclerosis.
XX
XX Example 13; SEQ ID NO 13; 167bp; English.
PS
XX The present invention describes a compound 8-80 nucleobases in length
CC targeted to, and which specifically hybridises with a nucleic acid
CC molecule encoding perillipin, and inhibits the expression of perillipin.
CC Also described: (1) a compound 8-80 nucleobases in length that
CC specifically hybridises with at least an 8-nucleobase portion of an
CC active site on a nucleic acid molecule encoding perillipin; (2) a

CC composition comprising the compound and a carrier or diluent; (3) a
CC method for inhibiting the expression of perlipin in cells or tissues by
CC contacting the cells or tissues with the compound so that expression of
CC perlipin is inhibited; (4) a method of creating an animal having a
CC disease or condition associated with perlipin by administering to the
CC animal a therapeutic or prophylactic amount of the compound so that
CC expression of perlipin is inhibited; and (5) a method for screening an
CC antisense compound by contacting a preferred target region of a nucleic
CC acid molecule encoding perlipin with one or more candidate antisense
CC compounds comprising at least an 8-nucleobase portion that is
CC complementary to the preferred target region, and selecting for one or
CC more candidate antisense compounds that inhibit the expression of a
CC nucleic acid encoding perlipin. The antisense compounds have
CC antidiabetic, anorectic, antiarteriosclerotic and cardiant activities,
CC and can be used in perlipin inhibitors. The compounds, compositions and
CC methods of the present invention are useful for treating a disease or
CC condition associated with perlipin, such as a metabolic disorder, e.g.
CC diabetes, obesity or atherosclerosis. They are also useful in research
CC and diagnostics for modulating the expression of perlipin. The present
CC sequence represents a PCR primer for mouse perlipin, which is used in an
CC example from the present invention.

XX Sequence 22 BP; 5 A; 6 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.6; DB 1; Length 22;
Best Local Similarity 81.8%; Pred. No. 8.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 4248 TCCTGAGGAATCACCCTTCAC 4269
22 TTCTGAGGAGAGACCTTCAC 1

RESULT 671

AA157112
ID AA157112 standard; DNA; 23 BP.

XX AA157112;

DT 17-SEP-2003 (first entry)

XX Human epithelial cadherine PCR primer 2 (from primer pair A).

XX Human epithelial cadherine; E cadherine; gastric carcinoma; PCR; primer;

KM ss.

XX Homo sapiens.

PN W02003042409-A2.

PD 22-MAY-2003.

PF 15-NOV-2002; 2002MO-IT000729.

XX 16-NOV-2001; 2001IT-TO001077.

XX (UYUR-) UNIV URBINO.

PA Magnani M, Graziano F, Ruzzo A;

XX WPI; 2003-449579/42.

PT Identifying greater susceptibility to gastric carcinoma by searching for
PT polymorphisms in the promoter of the E-cadherine gene.

PS Claim 11; Page 12; 17pp; English.

CC This invention relates to a novel method for the diagnosis of greater
CC susceptibility to gastric carcinoma, comprising searching for a possible
CC polymorphism in the promoter of the epithelial cadherine (E-cadherine)
CC gene. The method is useful for identifying a genetic polymorphism that
CC leads to a greater predisposition to the onset of gastric carcinoma. The
CC method is relatively simple, quick, accurate and reliable. The present

CC sequence is that of E-cadherine PCR primer 2 (from primer pair A) used
CC during a method to identify the genotype of an individual for a C to A
CC polymorphism at nucleotide -160 of the E-cadherine gene and claimed in
CC claim 11 of the specification

XX Sequence 23 BP; 6 A; 7 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.6; DB 1; Length 23;
Best Local Similarity 81.8%; Pred. No. 8.3e+02;
Matches 18; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2637 GTCCTGACAGCTGCTGTCAG 2658
2 GTACCTGACAGACAGACAG 23

RESULT 672

AAQ20163
ID AAQ20163 standard; DNA; 17 BP.

XX AAQ20163;

AC 01-APR-1992 (first entry)

XX Cross-linking oligomer 802 to target Cytomegalovirus.

XX deoxyribonucleic acid; major groove; CMV; inverted polarity region;

KM covalent cross-linking group; ss.

XX Synthetic.

XX Key

FT modified_base

FT /tag= a

FT /mod_base= OTHER

FT /note= "N-methyl-8-oxo-2'-deoxyadenine"

FT /tag= b

FT /mod_base= OTHER

FT /note= "N-methyl-8-oxo-2'-deoxyadenine"

FT /tag= c

FT /mod_base= OTHER

FT /note= "N-methyl-8-oxo-2'-deoxyadenine"

FT /tag= d

FT /mod_base= OTHER

FT /note= "N-methyl-8-oxo-2'-deoxyadenine"

FT /tag= e

FT /mod_base= OTHER

FT /note= "N-methyl-8-oxo-2'-deoxyadenine"

FT /tag= f

FT /mod_base= OTHER

FT /note= "N-methyl-8-oxo-2'-deoxyadenine"

FT /tag= g

FT /mod_base= m5c

FT /tag= h

FT /label= "inverted polarity_region"

FT /note= "see comments"

FT /tag= i

FT /mod_base= OTHER

FT /note= "N-methyl-8-oxo-2'-deoxyadenine"

FT /tag= j

FT /mod_base= OTHER

FT /note= "N-methyl-8-oxo-2'-deoxyadenine"

FT /tag= k

```
FT /mod_base= OTHER
FT /note= "N-methyl-8-oxo-2'-deoxyadenine"
PN WO9118997-A.
XX
XX 12-DEC-1991.
XX
XX 25-MAY-1990; 90US-00529346.
XX
XX 25-MAY-1990; 90US-00529346.
PR 14-JAN-1991; 91US-00640654.
XX
XX (GILE-) GILEAD SCI INC.
PA
XX Matteucci MD, Krawczyk S;
PI
XX WPI; 1992-007480/01.
XX
XX New sequence-specific non-photo-activated crosslinking agents - bind to
PT the major groove of duplex DNA and are esp. useful for treating latent
PT infections e.g. HIV.
XX
XX Example 4; Page 29; 42pp; English.
XX
XX This oligomer contains an inverted polarity region formed from an o-
CC xyloso dimer synthon. Residues 13 and 14 are linked via an o-xyloso group
CC (i.e. nucleotides that have xylose sugar linked via the o-xyloso ring).
CC The sequence is designed to target the Cytomegalovirus beginning at
CC nucleotide 176 and to covalently cross-link to it. See also AAQ20162-
XX Q20184
XX
XX Sequence 17 BP; 9 A; 1 C; 0 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 8.6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 5366 AAAATTTTACTTAAA 5382
Db 1 AAAATTTTACTTAAA 17
RESULT 673
AAQ30313
ID AAQ30313 standard; DNA; 17 BP.
XX
XX AAQ30313;
AC
XX 25-MAR-2003 (revised)
XX 07-DEC-1992 (first entry)
DT
XX Oligomer CMV802 for forming triplex with CMV target duplex.
DE
XX
XX Cytomegalovirus; herpes; AIDS; modified; HIV; RSV; HPV; malignancy;
XX hepatitis; inflammation; ss.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT modified_base 2
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT modified_base 3
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT modified_base 4
FT /*tag= d
```

```
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT modified_base 9
FT /*tag= e
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT modified_base 11
FT /*tag= f
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT modified_base 12
FT /*tag= g
FT /mod_base= m5c
FT misc_feature 13. .14
FT /*tag= 1
FT /note= "o-xyloso dimer synthon linkage"
FT misc_feature 14. .17
FT /*tag= k
FT /label= inverted_polarity_region
FT /note= "see comments"
FT modified_base 15
FT /*tag= h
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT modified_base 16
FT /*tag= i
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT modified_base 17
FT /*tag= j
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
XX
XX WO9209705-A1.
XX
XX 11-JUN-1992.
XX
XX 25-NOV-1991; 91WO-US008811.
XX
XX 23-NOV-1990; 90US-00617907.
XX 18-JAN-1991; 91US-00643382.
PR 08-APR-1991; 91US-00683420.
PR 17-APR-1991; 91US-00686544.
PR 17-APR-1991; 91US-00686546.
PR 17-APR-1991; 91US-00686547.
XX 27-SEP-1991; 91US-00766733.
XX
XX (GILE-) GILEAD SCI INC.
XX
XX Froehner B, Krawczyk S, Matteucci MD, Milligan J;
XX WPI; 1992-217083/26.
XX
XX New oligomers contg. modified bases - which form a triplex with G-C
PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
PT herpes malignancy and inflammation.
XX
XX Claim 12; Page 68; 77pp; English.
XX
XX The synthetic oligomer is capable of forming a triplex at physiological
CC pH with a purine rich target sequence by coupling into the major groove
CC of the duplex. The specific target sequence of this oligomer is a
CC cytomagalovirus duplex beginning at nucleotide 176 contg. a purine-rich
CC region concentrated on one chain of the duplex. The oligomer, and others
CC like it are useful in diagnosis and therapy of diseases characterised by
CC specific DNA duplex targets, e.g. cytomegalovirus; HPV, HIV, hepatitis B,
CC herpes, malignant tumours and inflammation. The triple helices form under
CC mild conditions thus assays may be carried out without subjecting the
CC test specimen to harsh conditions. The oligomer contains an inverted
CC polarity region formed from an o-xyloso dimer synthon. The linking gp. is
CC o-xyloso (nucleotides have the 3' positions of xylose sugars linked via
CC the o-xyloso ring). Two nucleotides are coupled through a xyloso residue
CC to form the dimer synthon. This additional modifications may render the
```


CC oligomer stable to nuclease activity. The oligomer is able to inhibit
CC gene expression, as verified by in vitro systems. See also AAQ25452-25501
CC and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 17 BP; 9 A; 1 C; 0 G; 7 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 8.6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 5366 AAAAAAAAACTTAA 5382
DB 1 AAAAAAAAACTTAA 17
RESULT 674
AA12445/c
ID AA12445 standard; DNA; 17 BP.
XX
AC AA12445;
XX
DT 17-SEP-1996 (first entry)
XX
DE Antiviral phosphorothioate oligonucleotide #28.
XX
KM Antiviral; phosphorothioate; mRNA 4; herpes simplex virus 1; HSV;
KM viral infection; HIV; varicella zoster virus; VZV; therapy; ss.
XX
OS Synthetic.
XX
FH Key location/Qualifiers
FT modified_base 1..17
FT /tag= a
FT /note= "phosphorothioate oligonucleotides"
XX
PN WO9603500-A1.
XX
PD 08-FEB-1996.
XX
PF 25-JUL-1995; 95WO-JP001472.
XX
PR 26-JUL-1994; 94JP-00173862.
PR 01-NOV-1994; 94JP-00268603.
XX
PA (LITL-) LIT INGT CO LTD.
PA (KAKE) KAKEN PHARM CO LTD.
PI Shoji Y, Shimada J, Mizushima Y, Iwatani W, Tamura N;
PI WPI; 1996-117045/12.
DR
XX
PT Antiviral phosphorothioate oligonucleotide(s) - active against e.g.
PT herpes simplex virus 1, HIV and varicella zoster virus.
XX
PS Claim 6; Page 150; 163pp; Japanese.
XX
CC AA12445-T12454 represent phosphorothioate oligonucleotides with
CC antiviral activity. These sequences, and the phosphorothioate
CC oligonucleotides represented by AA12448-T12434 (which are complementary
CC to regions of the mRNA 4 or 5 of herpes simplex virus 1 (HSV)), are
CC effective in the prevention and treatment of viral infection. The
CC sequences are especially effective against infection by HSV, HIV or
CC varicella zoster virus (VZV)
CC
SQ Sequence 17 BP; 2 A; 1 C; 12 G; 2 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 8.6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 228 CCCTCACCTCACCTC 244
DB 17 CCCTCACCTCACCTC 1

RESULT 675
AAV92388
ID AAV92388 standard; RNA; 17 BP.
XX
AC AAV92388;
XX
DT 18-FEB-1999 (first entry)
XX
DE Human A-Raf substrate position 166.
XX
KM Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
KM target; substrate; catalyst; modulation; expression; Raf gene; delivery;
KM screening; identification; synthesis; deprotection; purification; cancer;
KM inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;
KM restenosis; rheumatoid arthritis; ss.
XX
OS Homo sapiens.
XX
PN WO9850530-A2.
XX
PD 12-NOV-1998.
XX
PF 05-MAY-1998; 98WO-US009249.
XX
PR 09-MAY-1997; 97US-0046059P.
PR 09-JUN-1997; 97US-0049002P.
PR 03-JUL-1997; 97US-0051718P.
PR 22-AUG-1997; 97US-0056808P.
PR 02-OCT-1997; 97US-0061321P.
PR 02-OCT-1997; 97US-0061324P.
PR 05-NOV-1997; 97US-0064866P.
PR 19-DEC-1997; 97US-0068212P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Jarvis T, Matulic-Adamic J, Reynolds M, Kisch K, Bellon L;
PI Parry T, Beigelman L, Merswigen JA, Karpetsky A, Burgin A;
PI Thompson J, Workman CT, Beaudry A, Sweedler D;
XX
DR WPI; 1999-009494/01.
XX
PT Identifying new catalytic nucleic acid that modulates selected processes
PT - especially ribozymes that cleave Raf RNA for treating cancer,
PT restenosis, and also new ribozymes and modified nucleoside triphosphates
PT used as antiviral agents and synthons.
XX
PS Claim 177; Page 157; 259pp; English.
XX
CC A method has been developed for the identification of a nucleic acid
CC capable of modulating a process in a biological system. The method
CC comprises: (a) introducing into the system a random library of nucleic
CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising
CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC
CC in systems where modulation has occurred and/or determining the sequence
CC of at least part of the SBDs in such systems. Nucleic acid molecules with
CC endonuclease activity and catalytic activity, from the present invention,
CC are used to modulate gene expression in plant and mammalian cells and to
CC cleave target nucleic acid, particularly for treating systemic diseases
CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
CC ascites and infection. They may also be used to detect genetic drift and
CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs
CC with RNA-cleaving activity that modulate expression of the Raf gene, are
CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or
CC generally any condition associated with the level of c-raf. Introduction
CC of sugar/phosphate modifications increases stability against nuclease and
CC activity. AAV90922 to AAV93877 represent NACs that can be used in the
CC method, specifically for modulating the expression of a Raf gene
XX
SQ Sequence 17 BP; 3 A; 11 C; 1 G; 0 T; 2 U; 0 Other;
Query Match 0.3%; Score 15.4; DB 1; Length 17;

```
Best Local Similarity 88.2%; Pred. No. 8.6e+02;
Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1085 CCCCACTCAGCCAGC 1101
    |||||:|||||
Db 1 CCCCACTCAGCCCAUC 17

RESULT 676
AAA25454/c
ID AAA25454 standard; DNA; 17 BP.
XX
AC AAA25454;
XX
DT 19-JUL-2000 (first entry)
XX
DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1952.
XX
KW Oestrogen receptor; c-rafi; k-ras; bcl-2; ribozyme; cleavage;
KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
KW gene expression modification; cancer; phosphorothioate; endonuclease;
KW anticancer; breast cancer; endometrium cancer; ss.
XX
OS Homo sapiens.
XX
PN MO9954459-A2.
XX
PD 28-OCT-1999.
XX
PF 19-APR-1999; 99MO-US008547.
XX
PR 20-APR-1998; 98US-0082404P.
XX
PR 23-JUN-1998; 98US-00103636.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L,
PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haeblerl P;
PI Matulic-Adamic J;
DR MPI; 2000-013248/01.
XX
PT New nucleic acids that interact, and optionally cleave, target sequences,
PT used to treat cancer.
XX
PS Claim 77; Page 79; 148pp; English.
XX
CC The present invention describes nucleic acids (A) that interact stably
CC with a target sequence and contain at least one phosphoro(dithioate
CC link, having endonuclease activity. (A), and more generally any catalytic
CC nucleic acid (A') that modulates expression of the oestrogen receptor
CC gene, are used to treat cancer (particularly of breast or endometrium),
CC in vivo or by transforming cells ex vivo and implanting treated cells, or
CC for other conditions associated with levels of oestrogen receptor.
CC Because of the high selectivity for targeted RNA, (A) can also be used to
CC correlate inhibition of gene expression with alterations in phenotype,
CC particularly for identification of therapeutic targets, and as research
CC reagents (for RNA, in the same way that restriction endonucleases are
CC used with DNA). The combination of modifications in (A) improves
CC resistance to nucleases, binding affinity and/or activity. AAA23503 to
CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
CC AAA24748 to AAA25992 represent their corresponding target sequences.
CC AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme
CC sequences, and AAA26107 to AAA26218 represent their corresponding target
CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
CC antisense oligonucleotides used in the exemplification of the present
CC invention
XX
SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
```

```
Query Match 0.3%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 8.6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 5399 ATACAAAAAGAAAAA 5415
    |||||:|||||
Db 17 ATACAAAAAGAAAAA 1

RESULT 677
ABL46875/c
ID ABL46875 standard; RNA; 17 BP.
XX
AC ABL46875;
XX
DT 27-JUN-2003 (first entry)
XX
DE Human GRID G-cleaver ribozyme substrate oligonucleotide #16.
XX
KW Human; Grb2-related with insert domain; GRID; T-cell;
KW co-stimulatory adaptor protein; tissue rejection; graft rejection;
KW leukaemia; cytostatic; ss.
XX
OS Homo sapiens.
XX
PN MO200162911-A2.
XX
PD 30-AUG-2001.
XX
PF 23-FEB-2001; 2001WO-US005957.
XX
PR 24-FEB-2000; 2000US-0184594P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (GLAXO) GLAXO GROUP LTD.
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;
PI MPI; 2001-550088/61.
XX
DR MPI; 2001-550088/61.
XX
PT New nucleic acid(s) for regulating the Grb2-related with insert domain
PT (GRID) gene comprises using antisense and enzymatic nucleic acid
PT molecules such as hammerhead ribozymes.
XX
PS Claim 4; Page 69; 108pp; English.
XX
CC The present invention relates to oligonucleotides that downregulate the
CC expression of human Grb2-related with insert domain (GRID) gene. GRID is
CC a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful
CC for modulating the expression of GRID, to treat conditions such as
CC tissue/graft rejection and leukaemia. The oligonucleotides can also be
CC administered in conjunction with other therapies such as radiation,
CC chemotherapy and cyclosporin treatment. The present oligonucleotide was
CC used to illustrate the invention
XX
SQ Sequence 17 BP; 3 A; 5 C; 5 G; 0 T; 4 U; 0 Other;
```

```
Query Match 0.3%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 8.6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

KW	Cytostatic; viruicide; neuroprotective; nootropic; neuropilic; gene chip
KV	antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KM	schizophrenia; protein chip; gene therapy; tumour suppression;
KX	human fukutin; db.
XX	
OS	Homo sapiens.
XX	
PN	WO2003025175-A2.
XX	
PD	27-MAR-2003.
XX	
PF	17-SEP-2002; 2002MO-IB004208.
XX	
PR	17-SEP-2001; 2001FR-00011978.
XX	
PA	(MOLE-) MOLECULAR ENGINES LAB.
PI	Teleman A, Amson R, Tuljander M;
XX	
DR	WPI, 2003-313353/30.
XX	
PT	New isolated nucleic acid, useful for treating viral diseases associated
PT	with tumors and cell degeneration, also related polypeptides, antibodies
XX	and transfected cells.
XX	
PS	Disclosure; Page 477; 720pp; French.
XX	
CC	The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC	given in the specification, a sequence containing at least 15 consecutive
CC	nucleotides from the 17 mer sequence, a sequence with, after optimal
CC	alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC	hybridizes to them under highly stringent conditions, or the complement
CC	of any of them, or the corresponding RNA. The novel isolated nucleic
CC	acids of the invention are useful as probes and primers for detecting,
CC	identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC	component of a gene chip, in vitro as (anti)sense reagents, and for
CC	production of recombinant polypeptides. Any of the nucleic acids,
CC	polypeptides, vectors containing the nucleic acids, cells containing the
CC	vector or antibodies directed against the polypeptides are useful for
CC	preparation of pharmaceuticals for prevention and/or treatment of viral
CC	diseases that are characterised by development of tumours or cell
CC	degeneration, specifically cancer but also Alzheimer's disease and
CC	schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC	patient samples is useful for diagnosis and/or prognosis of these
CC	diseases. The polypeptides can also be used to generate antibodies, and
CC	both the polypeptide and antibodies are useful as components of protein
CC	chips. The nucleic acid sequences of the invention can be used in gene
CC	therapy. This polynucleotide sequence represents a tumour suppression
CC	related human fukutin oligonucleotide of the invention
CC	
XX	
XX	
SQ	Sequence 17 BP; 8 A; 6 C; 2 G; 1 T; 0 U; 0 Other;
XX	
Query Match	0.3%; Score 15.4; DB 1; Length 17;
Best Local Similarity	94.1%; Pred. No. 8.6e+02;
Matches 16; Conservative	0; Mismatches 1; Indels 0; Gaps 0
QY	3936 GATCAACCCACAGCACA 3952
DB	1 GATCAACCCACAGACCA 17
XX	
RESULT 679	
AB222872/C	
ID	AB222872 standard; DNA; 17 BP.
XX	
AC	AB222872;
XX	
DT	07-APR-2003 (first entry)
XX	
DE	locked nucleic acid oligonucleotide LMAS.
XX	
KM	Phosphorothioate; locked nucleic acid; LNA; immunostimulatory;
KV	cytostatic; antimicrobial; gene therapy; pathogenic infection; cancer;

```

KV 88.
XX 1.
XX Synthetic.
XX OS
XX Key
XX FH modified_base
XX FT 1
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "N-terminally modified by TAMRA"
XX PN
XX WO2002102825-A2.
XX PD
XX 27-DEC-2002.
XX 14-JUN-2002; 2002WO-GB002728.
XX PR 15-JUN-2001; 2001GB-00014719.
XX PA (GLAXO ) GLAXO GROUP LTD.
XX PI Catchpole IR,
XX DR WPI; 2003-157022/15.
XX PT Novel locked nucleic acid conjugate useful in manufacturing a medicament
XX PT for treating or preventing pathogenic infections or cancer, has an
XX PS oligonucleotide having locked nucleic acid based on a functional moiety.
XX Example 1; Page 20; 101pp; English.
XX
XX The present invention describes a locked nucleic acid (LNA) conjugate (I)
XX comprising an oligonucleotide having at least one locked nucleic acid
XX based on a functional moiety. Also described: (1) a complex (II)
XX comprising (I) and a DNA sequence having a complementary sequence to the
XX oligonucleotide, and encoding a gene under the control of a promoter; (2)
XX a pharmaceutical composition (III) comprising (II) and a carrier or
XX diluent; (3) a device loaded with (III); and (4) an oligonucleotide (IV)
XX comprising a first region comprising an oligonucleotide sequence having
XX at least one LNA, and a second region comprising an immunostimulatory
XX oligonucleotide region containing at least one unmethylated CG di-
XX nucleotide motif. (I) has cytostatic and antimicrobial activities, and
XX can be used in gene therapy. (I) and (II) can be used in medicines, and in
XX the manufacture of a medicament for the treatment or the prevention of
XX pathogenic infections or cancer. (I) is useful for the preparation of
XX (III), by hybridising (I) with a plasmid capable of expressing a gene
XX encoding an antigen or therapeutic protein, and formulating the resulting
XX complex with a pharmaceutical carrier. The present sequence represents a
XX LNA oligonucleotide, which is used in an example from the present
XX invention
XX
XX Sequence 17 BP; 0 A; 9 C; 0 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 15.4; DB 1; Length 17;
XX Best Local Similarity 94.1%; Pred. No. 8.6e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0.
XX
XX QY 1181 GAGAAAGAGAGAGAGAG 1197
XX DB 17 GAGAGAGAGAGAGAGAG 1
XX
XX RESULT 680
XX ADB45378/C
XX ID ADB45378 standard; DNA; 17 BP.
XX AC ADB45378;
XX
XX 18-DEC-2003 (first entry)
XX
XX Tumour suppression/reversion associated nucleotide #5701.
XX
XX cytoskeletal; antiviral; neuroprotective; nootropic; neuroleptic; ss;
XX primer; probe; tumour suppression; tumour reversion; apoptosis;
XX

```

KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
 XX diagnosis.
 XX
 OS Homo sapiens.
 XX
 PN WO2003040369-A2.
 XX
 PD 15-MAY-2003.
 XX
 PF 17-SEP-2002; 2002WO-IB004219.
 XX
 PR 17-SEP-2001; 2001PR-00011981.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB.
 XX
 PI Telerman A, Amson R, Tuijnder M;
 XX WPI; 2003-441574/41.
 DR
 XX
 PT New nucleic acid encoding human prostate membrane-specific antigen,
 PT useful e.g. for treatment of tumors and viral infection, also related
 PT polypeptide and antibodies.
 XX
 PS Disclosure; Page 698; 771pp; French.
 XX
 CC The invention relates to the isolation of 6327 nucleotide sequences,
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
 CC sequence having at least 80% identity, after optimal alignment, with the
 CC nucleotides; a sequence that hybridizes under stringent conditions with
 CC the nucleotides; or the complement, or corresponding RNA, of the
 CC nucleotides. The nucleotides are used as probes or primers for detecting,
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
 CC sense and antisense sequences, of nucleotides involved in tumour
 CC suppression or reversion, apoptosis and/or viral resistance, to produce
 CC recombinant polypeptides, and to prepare transgenic animals, as
 CC experimental models. The nucleotides (also vectors containing them and
 CC cells containing the vectors), the encoded polypeptides and antibodies
 CC (Ab) against the polypeptide are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development of tumours
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
 CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can
 CC also be used to screen for their specific interactive molecules,
 CC potentially useful for treating diseases associated with abnormal
 CC expression of the nucleotides.
 CC
 SO Sequence 17 BP; 1 A; 7 C; 1 G; 8 T; 0 U; 0 Other;
 XX
 QY Query Match 0.3%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 8.6e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 DB 1186 AGAGAGAGAGAGAAATC 1202
 17 AGAGAGAGAGAGAGATC 1
 XX
 RESULT 681
 ADI51815
 ID ADI51815 standard; DNA; 17 BP.
 XX
 AC ADI51815;
 XX
 DT 15-APR-2004 (first entry)
 XX
 DE Human tumour suppression/reversion-related DNA sequence SegID#318.
 XX
 KW tumour suppression; tumour reversion; apoptosis; virus resistance;
 KW cytostatic; virucide; neuroprotective; neurotropic; neuroleptic; probe;
 KW primer; PCR; gene chip; antisense; viral disease; tumour;
 KW cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.
 XX
 OS Homo sapiens.

XX
 PN WO2003025177-A2.
 XX
 PD 27-MAR-2003.
 XX
 PF 17-SEP-2002; 2002WO-IB004523.
 XX
 PR 17-SEP-2001; 2001PR-00011980.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB.
 XX
 PI Telerman A, Amson R, Tuijnder M;
 XX WPI; 2003-313354/30.
 DR
 XX
 PT New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 XX
 PS Disclosure; SEQ ID NO 4318; 30pp; French.
 XX
 CC This invention relates to novel isolated nucleic acid sequences involved
 CC in the phenomena of tumour suppression, tumour reversion, apoptosis
 CC and/or resistance to viruses. The invention may be useful for the
 CC development of compounds with a cytostatic, virucide, neuroprotective,
 CC neurotropic or neuroleptic activity. The DNA sequences may be useful as
 CC probes and primers for detecting, identifying, quantifying and/or
 CC amplifying nucleic acid, for example as one component of a gene chip, in
 CC vitro as antisense reagents and for production of recombinant
 CC polypeptides. The invention may therefore be useful for preparation of
 CC pharmaceuticals for prevention and/or treatment of viral diseases that
 CC are characterised by development of tumours or cell degeneration.
 CC Specifically cancer but also Alzheimer's disease and schizophrenia. The
 CC present sequence is that of a nucleic acid sequence of the invention.
 CC Note: The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/publishedpat_sequences
 CC
 SO Sequence 17 BP; 8 A; 6 C; 2 G; 1 T; 0 U; 0 Other;
 XX
 QY Query Match 0.3%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 8.6e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 DB 1 GATCAACCCACAGAACCA 17
 3936 GATCAACCCACAGAACCA 3952
 XX
 RESULT 682
 ADM54233/C
 ID ADM54233 standard; mRNA; 17 BP.
 XX
 AC ADM54233;
 XX
 DT 03-JUN-2004 (first entry)
 XX
 DE Human GRID mRNA substrate sequence #508.
 XX
 KW Human; ss; GRID; Grb2-related with insert domain; hammerhead ribozyme;
 KW NCH ribozyme; G-cleaver ribozyme; Zinkyme; DNAzyme; amberzyme; Inozyme;
 KW hairpin ribozyme; tissue rejection; graft rejection; leukaemia.
 XX
 OS Homo sapiens.
 XX
 PN US2003134806-A1.
 XX
 PD 17-JUL-2003.
 XX
 PF 23-FEB-2001; 2001US-00792818.
 XX
 PR 10-FEB-2000; 2000US-0181594P.
 XX

PA (JARV/) JARVIS T.
 PA (CARL/) CARLOWITZ I V.
 PA (MCSW/) MCSWIGGEN J.
 PA (HAMB/) HAMBELIN P A.
 PA (ELLI/) ELLIS J H.
 PI Jarvis T, Carlowitz IV, Mcswiggen J, Hamblin PA, Ellis JH;
 XX WPI, 2003-829646/77.
 DR
 XX
 PT New nucleic acid molecule that down-regulates expression of Grb2-related
 PT with insert domain (GRID) gene, useful for treating a condition
 PT associated with the level of GRID, e.g. tissue/graft rejection and
 PT leukemia.
 PS
 XX Claim 4; SEQ ID NO 508; 74bp; English.
 XX
 CC The invention relates to a nucleic acid molecule that down-regulates
 CC expression of Grb2-related with insert domain (GRID) gene, e.g. a
 CC hammerhead ribozyme, NCH ribozyme, G-cleaver ribozyme, Zinzyme, DNzyme,
 CC amberzyme, Inozyme or hairpin ribozyme. Also include are a mammalian cell
 CC including the novel nucleic acid molecule, reducing GRID activity in a
 CC cell by contacting the cell with the novel nucleic acid molecule,
 CC treating a patient having a condition associated with the level of GRID
 CC (e.g. tissue/graft rejection or leukemia) by contacting the cell with
 CC the novel nucleic acid molecule, cleaving RNA of a GRID gene by
 CC contacting the cell with the novel nucleic acid molecule, an expression
 CC vector comprising a nucleic acid sequences (encoding at least the novel
 CC mammalian cell including the expression vector and an enzymatic nucleic
 CC acid molecule that cleaves RNA derived from a GRID gene. The nucleic acid
 CC molecule is useful for treating a condition associated with the level of
 CC GRID, e.g. tissue/graft rejection and leukemia. The present sequence is
 CC a target region for the enzymatic nucleic acids of the invention.
 XX
 SQ Sequence 17 BP; 3 A; 5 C; 5 G; 0 T; 4 U; 0 Other;
 QY
 Db 4429 GAGGCTTGTGTGAACC 4445
 17 GAGGCTTGTGTGAACC 1
 Query Match 0.3%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 8.6e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

RESULT 683
 ADH70294/c
 ID ADH70294 standard; DNA; 17 BP.
 XX
 AC ADH70294;
 XX
 XX 25-MAR-2004 (first entry)
 DT
 XX
 DB Human Vbeta gene repeat sequence #84.
 XX
 KW human; T-cell associated disease; Vbeta; autoimmune disease;
 KW degenerative nervous system disease; graft versus host disease;
 KW hypersensitivity disease; infectious disease; neoplastic disease;
 KW Addison's disease; atrophic gastritis;
 KW degenerative nervous system disease; multiple sclerosis;
 KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
 KW allergy; type II hypersensitivity; Goodpasture's syndrome;
 KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
 KW HIV; fungal infection; Candida; parasitic infection; schistosoma;
 KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
 KW lymphoproliferative disease; leukemia; lymphoma; cancer; brain cancer;
 KW breast cancer; ds.
 KM
 XX
 OS Homo sapiens.
 XX
 PN US2002150891-A1.
 XX

PD 17-OCT-2002.
 XX
 XX 05-MAR-1999; 99US-00263959.
 PR
 XX 19-SEP-1994; 94US-00309335.
 PR 19-SEP-1995; 95US-00531241.
 XX
 PA (HOOD/) HOOD L B.
 PA (ROME/) ROMEN L.
 XX
 XX Hood LB, Rowen L;
 PI
 XX
 DR WPI, 2004-059052/06.
 XX
 PT Kit for diagnosing and treating T-cell associated diseases e.g.
 PT autoimmune, degenerative nervous system and infectious disease, comprises
 PT nucleic acid primers specifically priming and allowing amplification of a
 PT Vbeta gene.
 PS
 XX Disclosure; SEQ ID NO 488; 164bp; English.
 XX
 CC The invention relates to a kit for diagnosing and treating T-cell
 CC associated diseases which comprises a panel of nucleic acid primers
 CC specifically priming and allowing amplification of each Vbeta gene,
 CC VbetarNA or cDNA. The kit is useful for diagnosing organ transplant
 CC rejection and diagnosing and treating T-cell associated diseases
 CC including autoimmune diseases, degenerative nervous system diseases,
 CC graft versus host disease, hypersensitivity diseases, infectious diseases
 CC and neoplastic diseases. Autoimmune diseases include Addison's disease,
 CC atrophic gastritis. Degenerative nervous system diseases include multiple
 CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include type
 CC I hypersensitivities such as contact with allergens that lead to
 CC allergies, type II hypersensitivities such as those present in
 CC Goodpasture's syndrome and type IV hypersensitivities such as those
 CC manifested in leprosy. Infectious diseases include viral infections
 CC caused by viruses such as HIV, fungal infections such as those caused by
 CC the yeast genus Candida, parasitic infections such as those caused by
 CC schistosomes, filaria and bacterial infections such as those caused by
 CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
 CC such as leukemia, lymphomas and cancers such as cancer of the brain,
 CC breast. The present sequence represents a Vbeta gene repeat sequence.
 XX
 SQ Sequence 17 BP; 0 A; 8 C; 0 G; 9 T; 0 U; 0 Other;
 QY
 Db 1180 AGAGAAAGAGAGAGAG 1196
 17 AGAGAGAGAGAGAGAG 1
 Query Match 0.3%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 8.6e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

RESULT 684
 ADH70390/c
 ID ADH70390 standard; DNA; 17 BP.
 XX
 AC ADH70390;
 XX
 XX 25-MAR-2004 (first entry)
 DT
 XX
 DB Human Vbeta gene repeat sequence #180.
 XX
 KW human; T-cell associated disease; Vbeta; autoimmune disease;
 KW degenerative nervous system disease; graft versus host disease;
 KW hypersensitivity disease; infectious disease; neoplastic disease;
 KW Addison's disease; atrophic gastritis;
 KW degenerative nervous system disease; multiple sclerosis;
 KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
 KW allergy; type II hypersensitivity; Goodpasture's syndrome;
 KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
 KW HIV; fungal infection; Candida; parasitic infection; schistosoma;
 KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
 KM

KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
 KW breast cancer; ds.
 XX
 OS Homo sapiens.
 XX
 PN US2002150891-A1.
 XX
 PD 17-OCT-2002.
 XX
 PF 05-MAR-1999; 99US-00263959.
 XX
 PR 19-SEP-1994; 94US-00309335.
 PR 19-SEP-1995; 95US-00531241.
 XX
 PA (HOOD/) HOOD L E.
 PA (ROME/) ROMEN L.
 XX
 PI Hood LE, Rowen L;
 XX
 DR WPI; 2004-059052/06.
 XX
 PT Kit for diagnosing and treating T-cell associated diseases e.g.
 PT autoimmune, degenerative nervous system and infectious disease, comprises
 PT nucleic acid primers specifically priming and allowing amplification of a
 PT Vbeta gene.
 XX
 PS Disclosure; SEQ ID NO 584; 164bp; English.
 XX
 CC The invention relates to a kit for diagnosing and treating T-cell
 CC associated diseases which comprises a panel of nucleic acid primers
 CC specifically priming and allowing amplification of each Vbeta gene,
 CC VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
 CC rejection and diagnosing and treating T-cell associated diseases
 CC including autoimmune diseases, degenerative nervous system diseases,
 CC graft versus host disease, hypersensitivity diseases, infectious diseases
 CC and neoplastic diseases. Autoimmune diseases include Addison's disease,
 CC atrophic gastritis, degenerative nervous system diseases include multiple
 CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
 CC I hypersensitivities such as contact with allergens that lead to
 CC allergies, Type II hypersensitivities such as those present in
 CC Goodpasture's syndrome and Type IV hypersensitivities such as those
 CC manifested in leprosy. Infectious diseases include viral infections
 CC caused by viruses such as HIV, fungal infections such as those caused by
 CC the yeast genus Candida, parasitic infections such as those caused by
 CC schistosomes, filaria and bacterial infections such as those caused by
 CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
 CC such as leukaemias, lymphomas and cancers such as cancer of the brain,
 CC breast. The present sequence represents a Vbeta gene repeat sequence.
 XX
 SQ Sequence 17 BP; 0 A; 9 C; 0 G; 8 T; 0 U; 0 Other;
 QY
 Db 1181 GAGAAAGAGAGAGAG 1197
 17 GAGAGAGAGAGAGAGAG 1
 RESULT 685
 ADH70382/C
 ID ADH70382 standard; DNA; 17 BP.
 XX
 AC ADH70382;
 XX
 DT 25-MAR-2004 (first entry)
 XX
 DE Human Vbeta gene repeat sequence #172.
 XX
 KW human; T-cell associated disease; Vbeta; autoimmune disease;
 KW degenerative nervous system disease; graft versus host disease;
 KW hypersensitivity disease; infectious disease; neoplastic disease;

KW Addison's disease; atrophic gastritis;
 KW degenerative nervous system disease; multiple sclerosis;
 KW Alzheimer's disease; hypersensitivity disease; Type I hypersensitivity;
 KW allergy; Type II hypersensitivity; Goodpasture's syndrome;
 KW Type IV hypersensitivity; leprosy; infectious disease; viral infection;
 KW HIV; fungal infection; Candida; parasitic infection; schistosome;
 KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
 KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
 KW breast cancer; ds.
 XX
 OS Homo sapiens.
 XX
 PN US2002150891-A1.
 XX
 PD 17-OCT-2002.
 XX
 PF 05-MAR-1999; 99US-00263959.
 XX
 PR 19-SEP-1994; 94US-00309335.
 PR 19-SEP-1995; 95US-00531241.
 XX
 PA (HOOD/) HOOD L E.
 PA (ROME/) ROMEN L.
 XX
 PI Hood LE, Rowen L;
 XX
 DR WPI; 2004-059052/06.
 XX
 PT Kit for diagnosing and treating T-cell associated diseases e.g.
 PT autoimmune, degenerative nervous system and infectious disease, comprises
 PT nucleic acid primers specifically priming and allowing amplification of a
 PT Vbeta gene.
 XX
 PS Disclosure; SEQ ID NO 576; 164bp; English.
 XX
 CC The invention relates to a kit for diagnosing and treating T-cell
 CC associated diseases which comprises a panel of nucleic acid primers
 CC specifically priming and allowing amplification of each Vbeta gene,
 CC VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
 CC rejection and diagnosing and treating T-cell associated diseases
 CC including autoimmune diseases, degenerative nervous system diseases,
 CC graft versus host disease, hypersensitivity diseases, infectious diseases
 CC and neoplastic diseases. Autoimmune diseases include Addison's disease,
 CC atrophic gastritis, degenerative nervous system diseases include multiple
 CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
 CC I hypersensitivities such as contact with allergens that lead to
 CC allergies, Type II hypersensitivities such as those present in
 CC Goodpasture's syndrome and Type IV hypersensitivities such as those
 CC manifested in leprosy. Infectious diseases include viral infections
 CC caused by viruses such as HIV, fungal infections such as those caused by
 CC the yeast genus Candida, parasitic infections such as those caused by
 CC schistosomes, filaria and bacterial infections such as those caused by
 CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
 CC such as leukaemias, lymphomas and cancers such as cancer of the brain,
 CC breast. The present sequence represents a Vbeta gene repeat sequence.
 XX
 SQ Sequence 17 BP; 0 A; 8 C; 0 G; 9 T; 0 U; 0 Other;
 QY
 Db 1180 AGAGAAAGAGAGAGA 1196
 17 AGAGAGAGAGAGAGAGA 1
 RESULT 686
 AAT32141
 ID AAT32141 standard; DNA; 18 BP.
 XX
 AC AAT32141;
 XX

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DT 16-SBP-1996 (first entry)
XX DNA sequencing "primer" (primer/linker) complementary sense strand.
DE Sense strand; DNA sequencing; oligonucleotide; primer; linker;
XX priming site; labelling region; cohesive end; complementary strand; ds.
XX Synthetic.
XX Key Location/Qualifiers
FH misc_feature 1..18
FT /*tag= a
FT /note= "forms doubled stranded segment when bound to
FT nucleotides 5-22 of the sequence given in AAT12342"
PN MO9602673-A1.
XX 01-FEB-1996.
XX 14-JUL-1995; 95MO-US008894.
XX 14-JUL-1994; 94US-00275169.
XX (AMIC-) AMICON INC.
XX Leonard JT;
XX WPI; 1996-105934/11.
XX New oligo:nucleotide(s) for DNA sequencing - having a priming site, a
XX labelling region and a cohesive end complementary to a restriction
XX fragment sequence.
XX Disclosure; Page 5; 23pp; English.
XX The present sequence is an example of a complementary sense strand from a
XX novel DNA sequencing oligonucleotide called a "primer" (primer/linker),
XX which comprises a priming site, labelling region, cohesive end and
XX complementary strand. The priming site is the optimal target for
XX annealing prior to treatment with polymerase. The labelling region is a
XX labelled sequence which directs DNA polymerase to incorporate multiple
XX labelled, e.g. radioactive nucleotides. The cohesive end provides
XX complementary ends for ligation of primers to restriction fragments. The
XX complementary strand provides a region of double stranded DNA which is
XX required by DNA ligases for the attachment of the primer to a
XX restriction fragment. A prela. sequencing procedure comprises the
XX ligation of primers to restriction fragments from the DNA mol. to be sequenced,
XX attached restriction fragments, conc. and buffer exchange, generation and
XX sepn. of sequencing prods., exposure of X-ray film to sequencing prods.
XX and detection of the signal on the film
XX
SQ Sequence 18 BP; 14 A; 2 C; 1 G; 1 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 8.6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 5401 ACAAAAAGAAAATG 5417
Db 2 ACAAAAAGAAAATG 18
RESULT 687
AAT98144/c
ID AAT98144 standard; DNA; 18 BP.
XX
XX AAT98144;
XX
XX 13-MAR-1998 (first entry)
XX Primer V-alpha(16) for T-cell receptor alpha chain variable region.
XX

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```

KM Antibody; T-cell receptor; beta chain; human immunodeficiency virus; HIV;
KM blood; attenuation; primer; PCR; amplification; variable region;
KM constant region; TCR; ss.
XX
XX Synthetic.
XX OS Homo sapiens.
XX US565355-A.
XX
XX 09-SBP-1997.
XX
XX 07-JUN-1995; 95US-00488212.
XX
XX 09-NOV-1992; 92US-00973485.
XX 18-OCT-1994; 94US-00408011.
XX
XX (CONS-) CONSORZIO BIOTECNOLOGIE.
XX
XX Prim D;
XX
XX WPI; 1997-456759/42.
XX
XX Removal of T-cell receptor-specific antibody from blood of HIV-infected
XX person - by extracorporeal blood treatment, to attenuate or avert
XX development of AIDS from HIV infection.
XX
XX Example 1; Col 11; 43pp; English.
XX
XX The invention relates to a method for removing an antibody specific for
XX TCR-V beta (T-cell receptor V beta protein) from an HIV-infected person
XX by removing blood from the person, removing the antibody from the blood,
XX and reintroducing the blood into the person, thus allowing attenuation or
XX aversion of immunodeficiency. The primers AAT98100-198150 are used to
XX check the efficiency of removal by detecting expression of the TCR-V-beta
XX and V-alpha genes in a blood sample after treatment. This primer is
XX targeted to the variable region sequence of the alpha chain gene and can
XX be used in the amplification with primers AAT98148 or AAT98149
XX
SQ Sequence 18 BP; 3 A; 7 C; 2 G; 6 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 8.6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 4298 TTGGAAGAACTGGAG 4314
Db 18 TTGGAAGAACTGGAG 2
RESULT 688
AAX85987/c
ID AAX85987 standard; DNA; 18 BP.
XX
XX AAX85987;
XX
XX 13-SBP-1999 (first entry)
XX
XX PCR primer used to amplify T cell receptor Va region cDNA.
XX
XX Acquired immune deficiency syndrome; free antibody; paratope; epitope;
XX T cell receptor variable beta region; TCR-V beta region; binding agent;
XX CD4+ T cell; HIV; PCR primer; ss.
XX
XX Synthetic.
XX OS Homo sapiens.
XX US5928642-A.
XX
XX 27-JUL-1999.
XX
XX 18-OCT-1994; 94US-00408011.
XX 09-NOV-1992; 92US-00973485.
XX

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XX (CONS-) CONSORZIO BIOTECHNOLOGIE.
 PA Prim1 D;
 PI WPI, 1999-429481/36.
 DR
 XX
 PT Diagnosis and treatment of acquired immune deficiency syndrome.
 PS Disclosure, Col 57; 42pp; English.
 XX
 CC The specification describes a method for the diagnosis and treatment of
 CC acquired immune deficiency syndrome, in a person having free antibodies
 CC which have a paratope capable of binding to an epitope of a T cell
 CC receptor variable beta (TCR-V beta) region. The method comprises
 CC administering a binding agent homologous with the TCR-V beta epitope. The
 CC binding agent is useful in assays for detecting various CD4+ T cell
 CC subpopulations which carry particular V beta components. The binding
 CC agent is also useful in the treatment of people infected with HIV where
 CC it is able to remove an antibody able to bind with an epitope on a TCR-V
 CC beta cell in the blood of an infected person. The present PCR primer is
 CC used to amplify the TCR Va region, in the course of the invention
 XX
 SQ Sequence 18 BP; 3 A; 7 C; 2 G; 6 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 8.6e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 4298 TTCCGAGGAACTCGAG 4314
 DB 18 TTCAGAGGAACTCGAG 2
 RESULT 689
 AAX88163/C
 ID AAX88163 standard; DNA; 18 BP.
 XX
 AC AAX88163;
 XX
 DT 09-SEP-1999 (first entry)
 XX
 DE T cell receptor alpha chain primer V-alpha16.
 XX
 KM T cell receptor; beta chain; primer; antibody; paratope; AIDS; vaccine;
 KM epitope; TCR-V beta; immunogenic; anti-idiotypic; antiviral; detection;
 KM CD4+ cell subpopulation; acquired immune deficiency syndrome; ss.
 XX
 OS Synthetic.
 XX
 PN US5925513-A.
 XX
 PD 20-JUL-1999.
 XX
 PF 07-JUN-1995; 95US-00488209.
 XX
 PR 09-NOV-1992; 92US-00973485.
 PR 18-OCT-1994; 94US-00408011.
 XX
 PA (CONS-) CONSORZIO BIOTECHNOLOGIE.
 XX
 PI Prim1 D;
 DR WPI, 1999-418267/35.
 XX
 PT Diagnosis and treatment of acquired immune deficiency syndrome onset.
 PS Example 1; Col 11-12; 42pp; English.
 XX
 CC This invention describes novel method for binding free antibodies having
 CC a paratope specific to an epitope on a T cell receptor (TCR-V beta) while
 CC providing an immunogenic substance able to raise anti-idiotypic
 CC antibodies which bind to free antibodies bound at the same paratope

CC specific to the epitope on the TCR-V beta and introducing this into a
 CC person to raise anti-idiotypic antibodies. The products of the invention
 CC have antiviral activity and can be used in vaccines. The specific
 CC antibody binding affinities are useful in assays which detect the
 CC presence of CD4+ cell subpopulations carrying particular V beta
 CC components of the TCR-V beta in people infected with acquired immune
 CC deficiency syndrome (AIDS). AAX88119-X88169 represents primers used in
 CC the method of the invention
 XX
 SQ Sequence 18 BP; 3 A; 7 C; 2 G; 6 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 8.6e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 4298 TTCCGAGGAACTCGAG 4314
 DB 18 TTCAGAGGAACTCGAG 2
 RESULT 690
 AAA08931
 ID AAA08931 standard; DNA; 18 BP.
 XX
 AC AAA08931;
 XX
 DT 01-AUG-2000 (first entry)
 XX
 DE Human survivin DNA antisense oligonucleotide, ISIS 23673.
 XX
 KM Survivin; inhibitor of apoptosis; IAP; caspase inhibitor; caspase-3;
 KM cell cycle regulation; cancer; cytostatic; antisense oligonucleotide; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..18
 FT /*tag= a
 FT /note= "phosphorothioate backbone"
 XX
 PN WO200018781-A1.
 XX
 PD 06-APR-2000.
 XX
 PF 23-SEP-1999; 99WO-US022076.
 XX
 PR 29-SEP-1998; 98US-00163162.
 PR 05-APR-1999; 99US-00286407.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Bennett CF, Ackermann EJ, Swayze EE, Cowbert LM;
 DR WPI, 2000-293103/25.
 XX
 PT Antisense molecules targeted to Survivin, useful for inducing apoptosis
 PT in cancer cells.
 XX
 PS Example 15; Page 68; 73pp; English.
 XX
 CC This is an antisense oligonucleotide targeted to the coding sequence,
 CC nucleotide 700, of human survivin DNA (see AAA08903). AAA08910-49 were
 CC analyzed for effect on survivin mRNA levels by quantitative real-time
 CC PCR. The data obtained on survivin mRNA levels from three experiments. This
 CC antisense oligonucleotide provided 18% inhibition of survivin mRNA. It was
 CC found that ISIS 23667 (AAA08925) provided 70% inhibition and ISIS 23672
 CC (AAA08930) provided 64% inhibition. Survivin, an IAP (inhibitor of
 CC apoptosis) Caspase inhibitor, has been found to be involved in cell cycle
 CC regulation and is expressed in the G2/M phase of the cell-cycle in a cell
 CC cycle regulated manner and associates with microtubules of the mitotic
 CC spindle. Disruption of this interaction results in loss of survivin's
 CC anti-apoptotic function and increased caspase-3 activity during mitosis.

CC Caspase-3 is associated with apoptotic cell death. It is therefore
 CC believed that survival may counteract a default induction of apoptosis in
 CC the G2/M phase. It is also believed that the over expression of survival
 CC in cancer may overcome this apoptotic check point, allowing undesired
 CC survival and division of cancer cells. Antisense oligonucleotides (ASO's)
 CC may be used to down regulate endogenous survival and to increase caspase-
 CC 3-dependent apoptosis in cells in the G2/M phase

XX
 SQ Sequence 18 BP, 10 A, 0 C, 8 G, 0 T, 0 U, 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 8.6e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1184 AAGAGAGAGAGAGAA 1200
 Db 1 AAGAGAGAGAGAGAGA 17

RESULT 691

AAAS8390/C
 ID AAAS8390 standard; DNA, 18 BP.

XX AAAS8390;

XX 01-NOV-2000 (first entry)

XX Polynucleotide # 6 used in a biomolecule detection system.

XX Nanocrystal; biomolecule detection; nonisotopic detection system; ss.

XX Synthetic.

XX WO200028088-A1.

XX 18-MAY-2000.

XX 10-NOV-1999; 99WO-US026612.

XX 10-NOV-1998; 98US-0107828P.

XX 09-NOV-1999; 99US-00437076.

XX (BIOC-) BIOCRYSTAL LTD.

XX Barbera-Guillem E, Nelson MB, Castro S;

XX WPI; 2000-376593/32.

PT Functionalized nanocrystal carrying polynucleotide, used for detecting
 PT target analyte, forms dendrimers with complementary nanocrystals to
 PT amplify the fluorescent signal.

XX Example 3; Page 70; 72pp; English.

CC The present invention relates to functionalised nanocrystals for use in
 CC nonisotopic detection systems for biomolecules e.g. nucleic acids,
 CC proteins, lipids or drugs. The nanocrystals have polynucleotide strands
 CC attached to their surfaces with one end of the polynucleotide extending
 CC outwardly from the nanocrystal. The present sequence is one such
 CC polynucleotide. These nanocrystals are used with a second series of
 CC nanocrystals, which have polynucleotides complementary to the first
 CC polynucleotides, so that the respective complementary strands hybridise
 CC to each other and form a dendrimer. This dendrimer produces a signal
 CC which can then be detected e.g. fluorescence. The present sequence is
 CC composed mainly of TC repeats. This sequence may therefore be used with a
 CC polynucleotide composed mainly of AG repeats (AAAS8389)

XX Sequence 18 BP, 0 A, 8 C, 1 G, 9 T, 0 U, 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 8.6e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1180 AGAGAAAAGAGAGAGA 1196
 Db 18 AGAGAGAGAGAGAGA 2

RESULT 692

AAAS8389
 ID AAAS8389 standard; DNA, 18 BP.

XX AAAS8389;

XX 01-NOV-2000 (first entry)

XX Polynucleotide # 5 used in a biomolecule detection system.

XX Nanocrystal; biomolecule detection; nonisotopic detection system; ss.

XX Synthetic.

XX WO200028088-A1.

XX 18-MAY-2000.

XX 10-NOV-1999; 99WO-US026612.

XX 10-NOV-1998; 98US-0107828P.

XX 09-NOV-1999; 99US-00437076.

XX (BIOC-) BIOCRYSTAL LTD.

XX Barbera-Guillem E, Nelson MB, Castro S;

XX WPI; 2000-376593/32.

PT Functionalized nanocrystal carrying polynucleotide, used for detecting
 PT target analyte, forms dendrimers with complementary nanocrystals to
 PT amplify the fluorescent signal.

XX Example 3; Page 70; 72pp; English.

CC The present invention relates to functionalised nanocrystals for use in
 CC nonisotopic detection systems for biomolecules e.g. nucleic acids,
 CC proteins, lipids or drugs. The nanocrystals have polynucleotide strands
 CC attached to their surfaces with one end of the polynucleotide extending
 CC outwardly from the nanocrystal. The present sequence is one such
 CC polynucleotide. These nanocrystals are used with a second series of
 CC nanocrystals, which have polynucleotides complementary to the first
 CC polynucleotides, so that the respective complementary strands hybridise
 CC to each other and form a dendrimer. This dendrimer produces a signal
 CC which can then be detected e.g. fluorescence. The present sequence is
 CC composed mainly of AG repeats. This sequence may therefore be used with a
 CC polynucleotide composed mainly of TC repeats (AAAS8390)

XX Sequence 18 BP, 8 A, 0 C, 10 G, 0 T, 0 U, 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 8.6e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1181 GAGAAAGAGAGAGAG 1197
 Db 2 GAGAGAGAGAGAGAG 18

RESULT 693

AAZ77145
 ID AAZ77145 standard; DNA, 18 BP.

XX AAZ77145;

XX 10-SEP-2001 (first entry)

XX Human biallelic marker downstream amplification primer SEQ ID NO:11501.

```
XX Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX Homo sapiens.
XX WO954500-A2.
XX 28-OCT-1999.
XX 21-APR-1999; 99WO-IB000822.
XX 21-APR-1998; 98US-0082614P.
XX 23-NOV-1998; 98US-0109732P.
XX (GEST ) GENSET.
XX PA
XX PI Cohen D, Blumenfeld M, Chumakov I;
XX WPI; 2000-013267/01.
XX Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX Claim 9; Page 2682; 2745pp; English.
XX AA265654 to AA269578 represent human biallelic markers from the present
XX invention, which contain a polymorphic base at position 24 of their
XX nucleotide sequences. AA269579 to AA277440 represent amplification
XX primers for the biallelic markers. The biallelic markers of the invention
XX have a variety of uses: they can be used for high density mapping of the
XX human genome, and in complex association studies and haplotyping studies
XX which are useful in determining the genetic basis for disease states.
XX Compositions and methods of the invention can also be useful for the
XX identification of the targets for the development of pharmaceutical
XX agents and diagnostic methods, as well as the characterisation of the
XX differential efficacious responses to and side effects from
XX pharmaceutical agents acting on a disease as well as other treatment.
XX N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
XX 3367, are not actually given a sequence in the Sequence Listing from the
XX present invention
XX
XX Sequence 18 BP; 7 A; 0 C; 9 G; 2 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.3%; Score 15.4; DB 1; Length 18;
XX Best Local Similarity 94.1%; Pred. No. 8.6e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2436 GGATGAGAAAGGGAGAG 2452
DB 2 GGATTAAGAGGGAGAG 18
RESULT 694
AA272859
ID AA272859 standard; DNA; 18 BP.
XX
XX AA272859;
XX
XX 10-SEP-2001 (first entry)
XX
XX Human biallelic marker upstream amplification primer SEQ ID NO:7215.
XX
XX Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
XX Homo sapiens.
XX OS
```

```
XX WO954500-A2.
XX 28-OCT-1999.
XX 21-APR-1999; 99WO-IB000822.
XX 21-APR-1998; 98US-0082614P.
XX 23-NOV-1998; 98US-0109732P.
XX (GEST ) GENSET.
XX PA
XX PI Cohen D, Blumenfeld M, Chumakov I;
XX WPI; 2000-013267/01.
XX Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX Claim 9; Page 1769; 2745pp; English.
XX AA265654 to AA269578 represent human biallelic markers from the present
XX invention, which contain a polymorphic base at position 24 of their
XX nucleotide sequences. AA269579 to AA277440 represent amplification
XX primers for the biallelic markers. The biallelic markers of the invention
XX have a variety of uses: they can be used for high density mapping of the
XX human genome, and in complex association studies and haplotyping studies
XX which are useful in determining the genetic basis for disease states.
XX Compositions and methods of the invention can also be useful for the
XX identification of the targets for the development of pharmaceutical
XX agents and diagnostic methods, as well as the characterisation of the
XX differential efficacious responses to and side effects from
XX pharmaceutical agents acting on a disease as well as other treatment.
XX N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
XX 3367, are not actually given a sequence in the Sequence Listing from the
XX present invention
XX
XX Sequence 18 BP; 1 A; 6 C; 3 G; 8 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.3%; Score 15.4; DB 1; Length 18;
XX Best Local Similarity 94.1%; Pred. No. 8.6e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 4871 CTCAGTTCTCTCTCTG 4887
DB 1 CTCAGTTCTCTCTCTG 17
RESULT 695
AAS21649
ID AAS21649 standard; DNA; 18 BP.
XX
XX AAS21649;
XX
XX 21-NOV-2001 (first entry)
XX
XX Human Survivin antisense oligonucleotide #114.
XX
XX Survivin; human; mouse; cytostatic; antisense oligonucleotide;
KW hyperproliferative condition; cancer; apoptosis; cytokinesis; ss.
XX
XX Homo sapiens.
XX OS Synthetic.
XX WO200157059-A1.
XX
XX 09-ANG-2001.
XX
XX 30-JAN-2001; 2001WO-US002939.
XX
XX 02-FEB-2000; 2000US-00496694.
XX
XX (ISIS-) ISIS PHARM INC.
XX PA
```

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XX
PI Bennett CF, Ackermann EJ, Swayze BE, Cowsett LM;
XX
DR WPI; 2001-488863/53.
XX
PT Novel antisense compounds for modulating the expression of Survivin and
XX treatment of cancer.
XX
PS Example 17; Page 57; 120pp; English.
XX
CC The invention relates to antisense oligonucleotides targeted to a nucleic
CC acid molecule encoding human Survivin, where the antisense
CC oligonucleotide inhibits the expression of human Survivin. These
CC antisense oligonucleotides are used in the treatment of an animal
CC suffering from a disease or condition associated with Survivin, e.g. a
CC hyperproliferative condition such as cancer, and comprises administering
CC a therapeutically or prophylactically effective amount of the antisense
CC oligonucleotide so that expression of Survivin is inhibited. The
CC oligonucleotide can also be used to treat a human suffering from a
CC disease or condition characterised by a reduction in apoptosis comprising
CC administering the antisense oligonucleotide to a human. In addition, the
CC antisense oligonucleotide and a cytotoxic chemotherapeutic agent e.g.
CC taxol or cisplatin, can be used to modulate apoptosis, cytokinesis or the
CC cell cycle, or inhibit the proliferation in a cancer cell by contacting
CC the cell with the antisense oligonucleotide. AAS21521-AAS21768 represent
CC Survivin nucleic acids, and antisense oligonucleotides targeted to
CC Survivin, used in the method of the invention
CC
SQ Sequence 18 BP; 11 A; 0 C; 7 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 8.6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 1184 AAAGAGAGAGAGAGAAA 1200
DB 2 AAAGAGAGAGAGAGAGA 18
XX
RESULT 696
AAS21598
ID AAS21598 standard; DNA; 18 BP.
XX
AC AAS21598;
XX
DT 21-NOV-2001 (first entry)
XX
DE Human Survivin antisense oligonucleotide #64.
XX
KW Survivin; human; mouse; cytostatic; antisense oligonucleotide;
XX hyperproliferative condition; cancer; apoptosis; cytokinesis; ss.
XX
OS Homo sapiens.
XX
OS Synthetic.
XX
PN WO200157059-A1.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US002939.
XX
PR 02-FEB-2000; 2000US-00496694.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Ackermann EJ, Swayze BE, Cowsett LM;
XX
DR WPI; 2001-488863/53.
XX
PT Novel antisense compounds for modulating the expression of Survivin and
XX treatment of cancer.
XX
PS Example 16; Page 54; 120pp; English.
```

```
XX
CC The invention relates to antisense oligonucleotides targeted to a nucleic
CC acid molecule encoding human Survivin, where the antisense
CC oligonucleotide inhibits the expression of human Survivin. These
CC antisense oligonucleotides are used in the treatment of an animal
CC suffering from a disease or condition associated with Survivin, e.g. a
CC hyperproliferative condition such as cancer, and comprises administering
CC a therapeutically or prophylactically effective amount of the antisense
CC oligonucleotide so that expression of Survivin is inhibited. The
CC oligonucleotide can also be used to treat a human suffering from a
CC disease or condition characterised by a reduction in apoptosis comprising
CC administering the antisense oligonucleotide to a human. In addition, the
CC antisense oligonucleotide and a cytotoxic chemotherapeutic agent e.g.
CC taxol or cisplatin, can be used to modulate apoptosis, cytokinesis or the
CC cell cycle, or inhibit the proliferation in a cancer cell by contacting
CC the cell with the antisense oligonucleotide. AAS21521-AAS21768 represent
CC Survivin nucleic acids, and antisense oligonucleotides targeted to
CC Survivin, used in the method of the invention
CC
SQ Sequence 18 BP; 10 A; 0 C; 8 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 8.6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 1184 AAAGAGAGAGAGAGAAA 1200
DB 1 AAAGAGAGAGAGAGAGA 17
XX
RESULT 697
AAS21558
ID AAS21558 standard; DNA; 18 BP.
XX
AC AAS21558;
XX
DT 21-NOV-2001 (first entry)
XX
DE Human Survivin antisense oligonucleotide #24.
XX
KW Survivin; human; mouse; cytostatic; antisense oligonucleotide;
XX hyperproliferative condition; cancer; apoptosis; cytokinesis; ss.
XX
OS Homo sapiens.
XX
OS Synthetic.
XX
PN WO200157059-A1.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US002939.
XX
PR 02-FEB-2000; 2000US-00496694.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Ackermann EJ, Swayze BE, Cowsett LM;
XX
DR WPI; 2001-488863/53.
XX
PT Novel antisense compounds for modulating the expression of Survivin and
XX treatment of cancer.
XX
PS Example 15; Page 53; 120pp; English.
XX
CC The invention relates to antisense oligonucleotides targeted to a nucleic
CC acid molecule encoding human Survivin, where the antisense
CC oligonucleotide inhibits the expression of human Survivin. These
CC antisense oligonucleotides are used in the treatment of an animal
CC suffering from a disease or condition associated with Survivin, e.g. a
CC hyperproliferative condition such as cancer, and comprises administering
CC a therapeutically or prophylactically effective amount of the antisense
CC oligonucleotide so that expression of Survivin is inhibited. The
```

CC oligonucleotides can also be used to treat a human suffering from a
 CC disease or condition characterised by a reduction in apoptosis comprising
 CC administering the antisense oligonucleotide to a human. In addition, the
 CC antisense oligonucleotide and a cytotoxic chemotherapeutic agent e.g.
 CC taxol or cisplatin, can be used to modulate apoptosis, cytokinesis or the
 CC cell cycle, or inhibit the proliferation in a cancer cell by contacting
 CC the cell with the antisense oligonucleotide. AAS21521-AAS21768 represent
 CC Survivin nucleic acids, and antisense oligonucleotides targeted to
 CC Survivin, used in the method of the invention

XX Sequence 18 BP; 10 A; 0 C; 8 G; 0 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 8.6e+02;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1184 AAAGAGAGAGAGAGAA 1200
 Db 1 AAAGAGAGAGAGAGAG 17

RESULT 698

ABL61267 standard; DNA; 18 BP.

XX ABL61267;

XX 03-SEP-2002 (first entry)

XX HIV Pol sequencing primer SEQ ID 5.

XX Pol gene; primer; viral protease; reverse transcriptase; genotyping;

XX HIV infection; detection; drug resistance mutation; ss.

XX Human immunodeficiency virus.

XX US6379957-B1.

XX 30-APR-2002.

XX 21-SEP-1998; 98US-00158695.

XX 21-SEP-1998; 98US-00158695.

XX (JOHN/) JOHNSTON-DOW L A.

XX (DEME/) DEMETER L.

XX (WHIT/) WHITE C B.

XX (SONG/) SONG K.

XX (KOH/) KOHLEBERGER R.

XX (CONR/) CONRAD M.

XX (MYER/) MYERS A.

XX Johnston-Dow LA, Demeter L, White CB, Song K, Kohlenberger R;

XX Conrad M, Myers A;

XX WPI; 2002-506465/54.

XX Amplifying the HIV pol region using specific primers and a sequencing the

XX product using specific sequence primers allows detection of known drug

XX resistance mutations and so determination of viral genotype.

XX Claim 8; Col 13-14; 12pp; English.

XX This invention describes a novel method of analysing an HIV target

XX nucleic acid which comprises amplifying the target sequence using primers

XX specific for the HIV pol region (encoding the viral protease and reverse

XX transcriptase) and analysing the amplified product. The invention is used

CC the detection of clinically important regions of the HIV pol gene

CC described in the invention

XX Sequence 18 BP; 6 A; 9 C; 3 G; 0 T; 0 U; 0 Other;

QY 1261 AGCTACAGCCCA 1277

Db 1 AGCTACAGCCCA 17

RESULT 699

ABS97214/C

XX ABS97214 standard; DNA; 18 BP.

XX ABS97214;

XX 23-DEC-2002 (first entry)

XX Human CYP4502B1 promoter sequencing primer #4.

XX Human; ss; primer; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1;

XX cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002B1; LTF;

XX adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRP3; NR12;

XX aryl hydrocarbon receptor nuclear translocator; ARNT; catepsin S; CTSS;

XX cyclooxygenase 2; COX2; diazepam binding inhibitor; DBI; haematological;

XX epoxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;

XX glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;

XX HNMT; Kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;

XX NADPH quinone oxidoreductase 2; NQO2; sulfoxyltransferase thermolabile; STM;

XX UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;

XX UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; uPA;

XX multidrug resistance 1; lactotransferrin; orphan nuclear receptor;

XX multidrug resistance associated protein 3; cancer; prostate;

XX acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;

XX altered drug metabolism; cardiovascular function; colorectal tumour;

XX central nervous system; pulmonary; immunological; sequencing.

XX Homo sapiens.

XX WO200257410-A2.

XX 25-JUL-2002.

XX 28-NOV-2001; 2001WO-US044838.

XX 28-NOV-2000; 2000US-00724389.

XX (DNAS-) DNA SCI LAB INC.

XX Guida M, Hall J;

XX WPI; 2002-698522/75.

XX Isolated nucleic acid molecules having polymorphisms in known human genes

XX e.g. cytochrome p450 and catepsin S useful as genetic linkage markers

XX for locating, identifying and characterizing the genes responsible for

CC disorder-related traits.

XX Example 3; Page 103; 714pp; English.

XX This invention relates to the sequence of an isolated nucleic acid

XX molecule comprising at least one base variation from that of a known

XX human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2),

XX cytochrome P450 02E1 (CYP45002B1), adrenergic receptor beta1 (ADRB1),

XX aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator

XX (ARNT), catepsin S (CTSS), cyclooxygenase 2 (COX2), diazepam binding

XX inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating

XX protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl

XX transferase (HNMT), (Kallikrein 2) KLK2, nicotinamide-N-methyl

CC transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),
 CC sulfoltransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
 CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
 CC transferase (UGT2B15), uridine kinase receptor (URP), multidrug resistance 1
 CC (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3
 CC (MRP3), orphan nuclear receptor (NR1I2), or acetylcholine muscarinic
 CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.
 CC The polymorphisms in the human genes cited in the invention are useful as
 CC genetic linkage markers for locating and characterizing the genes that
 CC are responsible for specific traits within the genome and eventually
 CC identifying the genes responsible for a variety of disorder-related
 CC traits as a result of their e.g., overexpression, constitutive
 CC expression, mutation or underexpression, which may be used in diagnosing
 CC and/or treating the disorders. The nucleic acid molecules comprising the
 CC polymorphic sequences contained in CYP4501A1, CYP4501A2, CYP4502B1,
 CC ANMT, EPHX2, GSTI2, NNMT, NQO2, NR1I2, STM, UGT2B4, UGT2B7, UGT2B15, AHR,
 CC MDR1 and/or MDR3 are useful for screening individuals for altered drug
 CC metabolism. The polymorphic sequences contained in CYP4501A1, CYP4501A2,
 CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for
 CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are
 CC used to screen for altered cardiovascular function, in COX2 for altered
 CC susceptibility to colorectal tumours, in DBI or CHMR1 for altered central
 CC nervous system function, in FLAP and NNMT for altered pulmonary,
 CC immunological or haematological function, in ILK2 for altered serine
 CC protease activity in the prostate, in LTP for altered immunological or
 CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
 CC peripheral nervous system function. The present sequence represents a
 CC sequencing primer used to sequence the polymorphic genes of the invention
 CC XX

Sequence 18 BP; 5 A; 9 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 8.6e+02; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

4420 CTGCTGTGGAGGCTT 4436

17 CTGCTGTGGAGGCTT 1

Db

RESULT 700

AB182302/c

ID AB182302 standard; DNA; 18 BP.

AC AB182302;

15-FEB-2002 (first entry)

p53 mutation detection primer/probe #181.

Human; K-ras; PCR primer; probe; capture probe; mutation detection;
 ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
 infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
 oncogene; tumor suppressor; human papillomavirus; forensic;
 environmental monitoring; food industry; feed industry; ss.

Homo sapiens.

Synthetic.

MO200179548-A2.

25-OCT-2001.

04-APR-2001; 2001MO-US010958.

14-APR-2000; 2000US-0197271P.

(CORR) CORNELL RES FOUND INC.

Barany F, Zivyl M, Gerry NP, Favis R, Kilman R;

WPI, 2002-034366/04.

XX

PT Designing capture oligonucleotide probes for use on a support to which
 PT complementary oligonucleotides hybridize with little mismatch.
 XX Example 3; Page 66; 300p; English.

XX The present invention describes a method (M1) for designing capture
 CC oligonucleotide probes (I) for use on a support to which complementary
 CC oligonucleotide probes (II) will hybridize with little mismatch, where
 CC (I) have melting temperatures within a narrow range. The method is useful
 CC for detecting infectious diseases caused by bacterial infectious agents
 CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
 CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
 CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
 CC Epstein-Barr virus and polio virus, and parasitic infectious agents
 CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
 CC medialis. The method is also useful for detecting genetic diseases such
 CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
 CC Detecting cancer involving oncogenes, tumor suppressor genes, or genes
 CC involved in DNA amplification, replication, recombination or repair, the
 CC cancer is specifically associated with a gene selected from BRCA1 gene,
 CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
 CC method is also used for environmental monitoring, forensics and the food
 CC and feed industry, detecting comprises scanning (using e.g. a scanning
 CC electron microscope and infrared microscope) the support at the
 CC particular sites and identifying if ligation of the oligonucleotide probe
 CC sets occurred and correlating (using a computer) identified ligation to a
 CC presence or absence of the target nucleotide sequences. AB182074 to
 CC AB197546 represent oligonucleotide sequences used in the exemplification
 CC of the present invention
 CC XX

Sequence 18 BP; 3 A; 4 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 8.6e+02; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

4737 GGAGACCATCTCACC 4753

17 GGAGACCATCTCACC 1

Db

RESULT 701

AB182323/c

ID AB182323 standard; DNA; 18 BP.

AC AB182323;

15-FEB-2002 (first entry)

p53 mutation detection primer/probe #202.

Human; K-ras; PCR primer; probe; capture probe; mutation detection;
 ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
 infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
 oncogene; tumor suppressor; human papillomavirus; forensic;
 environmental monitoring; food industry; feed industry; ss.

Homo sapiens.

Synthetic.

MO200179548-A2.

25-OCT-2001.

04-APR-2001; 2001MO-US010958.

14-APR-2000; 2000US-0197271P.

(CORR) CORNELL RES FOUND INC.

Barany F, Zivyl M, Gerry NP, Favis R, Kilman R;

WPI, 2002-034366/04.

XX

```
XX Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.
XX
PS Example 3; Page 67; 300pp; English.
XX
CC The present invention describes a method (M1) for designing capture
CC oligonucleotide probes (I) for use on a support to which complementary
CC oligonucleotide probes (II) will hybridize with little mismatch, where
CC (I) have melting temperatures within a narrow range. The method is useful
CC for detecting infectious diseases caused by bacterial infectious agents
CC e.g. Salmonella, listeria monocytogenes and Haemophilus influenzae, fungal
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic citrus,
CC Epstein-Barr virus and polio virus, and parasitic infectious agents
CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
CC medinensis. The method is also useful for detecting genetic diseases such
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC involved in DNA amplification, replication, recombination or repair, the
CC cancer is specifically associated with a gene selected from BRCA1 gene,
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC method is also used for environmental monitoring, forensics and the food
CC and feed industry, detecting comprises scanning (using e.g. a scanning
CC electron microscope and infrared microscope) the support at the
CC particular sites and identifying if ligation of the oligonucleotide probe
CC sets occurred and correlating (using a computer) identified ligation to a
CC presence or absence of the target nucleotide sequences. AB182074 to
CC AB197546 represent oligonucleotide sequences used in the exemplification
CC of the present invention
XX
SQ Sequence 18 BP; 2 A; 4 C; 9 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 8.6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 4737 GGAGGCCATCCTCACC 4753
Db 17 GGAGGCCATCCTCACC 1
RESULT 702
AB182303/c
ID AB182303 standard; DNA; 18 BP.
XX
AC AB182303;
XX
DT 15-FEB-2002 (first entry)
XX
DE p53 mutation detection primer/probe #182.
XX
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200179548-A2.
XX
PD 25-OCT-2001.
XX
PF 04-APR-2001; 2001WO-US010958.
XX
PR 14-APR-2000; 2000US-0197271P.
XX
PA (CORR ) CORNELL RES FOUND INC.
PI Barany F, Zivvi M, Gerry NP, Pavis R, Kliman R;
XX
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DR WPI; 2002-034366/04.
XX
XX Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.
XX
PS Example 3; Page 66; 300pp; English.
XX
CC The present invention describes a method (M1) for designing capture
CC oligonucleotide probes (I) for use on a support to which complementary
CC oligonucleotide probes (II) will hybridize with little mismatch, where
CC (I) have melting temperatures within a narrow range. The method is useful
CC for detecting infectious diseases caused by bacterial infectious agents
CC e.g. Salmonella, listeria monocytogenes and Haemophilus influenzae, fungal
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic citrus,
CC Epstein-Barr virus and polio virus, and parasitic infectious agents
CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
CC medinensis. The method is also useful for detecting genetic diseases such
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC involved in DNA amplification, replication, recombination or repair, the
CC cancer is specifically associated with a gene selected from BRCA1 gene,
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC method is also used for environmental monitoring, forensics and the food
CC and feed industry, detecting comprises scanning (using e.g. a scanning
CC electron microscope and infrared microscope) the support at the
CC particular sites and identifying if ligation of the oligonucleotide probe
CC sets occurred and correlating (using a computer) identified ligation to a
CC presence or absence of the target nucleotide sequences. AB182074 to
CC AB197546 represent oligonucleotide sequences used in the exemplification
CC of the present invention
XX
SQ Sequence 18 BP; 3 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 8.6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 4737 GGAGGCCATCCTCACC 4753
Db 17 GGAGGCCATCCTCACC 1
RESULT 703
AAL47145/c
ID AAL47145 standard; DNA; 18 BP.
XX
AC AAL47145;
XX
DT 20-AUG-2002 (first entry)
XX
DE Pylrin domain containing protein coding sequence PCR primer #1.
XX
KW Pylrin domain; PYD domain; antiinflammatory; antiparkinsonian;
KW antiarteriosclerotic; antidiarrhetic; antibacterial; antiviral;
KW neuroprotective; antiarthritic; antirheumatic; antiasthmatic;
KW nephrotropic; osteopathic; nocotropic; intracellular signal transduction;
KW inflammation; Alzheimer's disease; infection; psoriasis; asthma;
KW arteriosclerosis; multiple sclerosis; rheumatoid arthritis; sarcoidosis;
KW osteoarthritis; glomerulonephritis; PCR; primer; ss.
XX
OS Unidentified.
OS OS
XX
PN WO200240668-A2.
XX
PD 23-MAY-2002.
XX
PF 30-OCT-2001; 2001WO-EP012545.
XX
PR 15-NOV-2000; 2000DE-01056687.
XX
PR 30-NOV-2000; 2000DE-01059595.
XX
PA (APOT-) APOTECH RES & DEV LTD.
```

XX Techopp J, Martinon F;
XX WPI, 2002-427093/45.
XX
XX New DNA encoding protein with pyrin domain, useful for treating diseases
XX involving impaired signal transduction, particularly inflammation, also
XX proteins and antibodies.
XX
XX Example, Page 51, 116pp; German.
XX
XX The present invention relates the DNA and their encoded proteins, where
XX the proteins contain at least one PYD (pyrin) domain. These can be used
XX to treat diseases associated with impaired intracellular signal
XX transduction, particularly inflammation such as psoriasis,
XX arteriosclerosis, bacterial or viral infections (particularly meningitis
XX and pneumonia), multiple sclerosis, rheumatoid arthritis, asthma,
XX sarcoidosis, glomerulonephritis and osteoarthritis, and also Alzheimer's
XX and Parkinson's diseases. The present sequence is a PCR primer used to
XX isolate a coding sequence of the invention
XX
XX Sequence 18 BP, 4 A, 3 C, 8 G, 3 T, 0 U, 0 Other;
XX
XX Query Match 0.3%; Score 15.4; DB 1; Length 18;
XX Best Local Similarity 94.1%; Pred. No. 8.6e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 4792 CTCCTGCGACTGACGAG 4808
XX 18 CTCCTGCGACTGACGCTG 2
XX
XX
XX RESULT 704
XX ADB98917
XX ID ADB98917 standard; DNA, 18 BP.
XX
XX ADB98917;
XX
XX 04-DEC-2003 (first entry)
XX
XX LRP5 mutagenic PCR primer #36.
XX
XX LRP5 mutagenic PCR primer #36.
XX
XX Osteopachic; Gene therapy; High Bone Mass; HBM; LRP5; Zmax1; LRP6;
XX bone mass modulation; osteoporosis; PCR; primer; ss.
XX
XX Synthetic.
XX
XX W0200292000-A2.
XX
XX 21-NOV-2002.
XX
XX 13-MAY-2002; 2002WO-US014877.
XX
XX 11-MAY-2001; 2001US-0290071P.
XX 17-MAY-2001; 2001US-0291311P.
XX 01-FEB-2002; 2002US-0351058P.
XX 04-MAR-2002; 2002US-0361293P.
XX
XX (GENO-) GENOME THERAPEUTICS CORP.
XX (AMHP) WYETH.
XX
XX Allen K, Anisowicz A, Graham JR, Morales A, Yaworsky PJ, Liu W,
XX WPI, 2003-129214/12.
XX
XX New nucleic acid comprising a mutation in LRP5 or LRP6, useful for
XX diagnosing a HBM-like phenotype in a subject and for preparing a
XX composition for modulating bone mass and/or lipid levels in a subject
XX suffering from e.g. osteoporosis.
XX
XX Disclosure; Page 53; 629pp; English.
XX
XX The present invention relates to High Bone Mass (HBM), LRP5 (Zmax1) and

CC LRP6 mutants, which results in a HBM-like phenotype when expressed in a
CC cell. The HBM-like phenotype results in bone mass modulation and/or lipid
CC level modulation. The invention is useful for diagnosing a HBM-like
CC phenotype in a subject and for preparing a composition for modulating
CC bone mass and/or lipid levels in a subject suffering from e.g.
CC osteoporosis. The present sequence was used to illustrate the invention.
XX
XX Sequence 18 BP, 6 A, 2 C, 8 G, 2 T, 0 U, 0 Other;
XX
XX Query Match 0.3%; Score 15.4; DB 1; Length 18;
XX Best Local Similarity 94.1%; Pred. No. 8.6e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 3422 TGAGCGAGAACTGAG 3438
XX 2 TGAGCGAGAACTGAG 18
XX
XX
XX RESULT 705
XX AD134074
XX ID AD134074 standard; DNA, 18 BP.
XX
XX AD134074;
XX
XX 22-APR-2004 (first entry)
XX
XX HIV pol region DNA sequencing primer #1.
XX
XX DNA amplification; sequencing; HIV pol; genotyping; sequence analysis;
XX heterozygosity; primer; ss.
XX
XX Human immunodeficiency virus.
XX
XX US6531586-B1.
XX
XX 11-MAR-2003.
XX
XX 05-MAR-2002; 2002US-00092022.
XX
XX 21-SEP-1998; 98US-00158695.
XX
XX (APPL-) APPLERA CORP.
XX
XX Johnston-Dow LA, Demeter L, White CB, Song K, Kohlenberger R;
XX Conrad M, Myers A;
XX WPI, 2003-539710/51.
XX
XX New kit comprising first and second primers, and a temperature-stable DNA
XX polymerase, useful for HIV sequencing and genotyping, and for automated
XX sequence analysis and determination of heterozygosity.
XX
XX Claim 3; SEQ ID NO 5, 11pp; English.
XX
XX The present invention relates to a method for amplifying and sequencing
XX HIV pol region DNA. Also disclosed is a kit comprising first and second
XX primers, and a temperature-stable DNA polymerase. The invention also
XX discloses a method for obtaining de novo sequence information for
XX different HIV quasi-species present in a patient's sample. The kit is
XX useful for HIV sequencing and genotyping, particularly for amplifying
XX regions of the HIV pol gene. It is also useful for automated sequence
XX analysis and determination of heterozygosity. The present sequence
XX represents a sequencing primer for HIV pol region DNA.
XX
XX Sequence 18 BP, 6 A, 9 C, 3 G, 0 T, 0 U, 0 Other;
XX
XX Query Match 0.3%; Score 15.4; DB 1; Length 18;
XX Best Local Similarity 94.1%; Pred. No. 8.6e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 1261 AGCCTACAGCCCA 1277
XX 1 AGCCACAGCCCA 17
XX

```

RESULT 706
ADH02714
ID ADH02714 standard; DNA; 18 BP.
XX
XX ADH02714;
AC
XX 11-MAR-2004 (first entry)
XX
XX
XX
XX Sequencing primer #1 for HIV pol gene.
DE
XX
XX HIV, pol gene; drug mutation; HIV sequencing; HIV genotyping; primer; ss.
XX
XX Human immunodeficiency virus.
OS
XX US2003219725-A1.
XX
XX
XX 27-NOV-2003.
XX
XX
XX 31-DEC-2002; 2002US-00335059.
XX
XX 21-SEP-1998; 98US-00158695.
XX
XX 05-MAR-2002; 2002US-00092022.
XX
XX (JOHN/) JOHNSTON-DOW L A.
XX
XX (DEME/) DEMETER L.
XX
XX (WHIT/) WHITE C B.
XX
XX (SONG/) SONG K.
XX
XX (KOH/) KOHLENBERGER R.
XX
XX (CONR/) CONRAD M.
XX
XX (MYER/) MYERS A.
XX
XX Johnston-Dow LA, Demeter L, White CB, Song K, Kohlenberger R;
XX Conrad M, Myers A;
XX
XX WPI, 2004-010863/01.
XX
XX
XX Analyzing an HIV target nucleic acid sequence by amplifying the double-
XX stranded nucleic acid template derived from HIV to produce amplified
XX target sequences and analyzing the amplified target sequences.
XX
XX Claim 8; SEQ ID NO 5; 14pp; English.
XX
XX
XX The present invention relates to a method for analysing a HIV pol gene
XX nucleic acid sequence. The method comprises combining a double-stranded
XX nucleic acid template derived from HIV, first and second primers, a
XX temperature-stable DNA polymerase and deoxyribonucleotides; amplifying
XX the double-stranded nucleic acid template to produce amplified target
XX sequences, and analysing the amplified target sequences. The determined
XX sequence can be compared to the sequence of known drug mutations in the
XX HIV pol gene. The method of the invention is useful for HIV sequencing
XX and genotyping. The present sequence represents a sequencing primer used
XX in the method of the invention.
XX
XX
XX Sequence 18 BP; 6 A; 9 C; 3 G; 0 T; 0 U; 0 Other;
SQ
XX
XX
XX Query Match 0.3%; Score 15.4; DB 1; Length 18;
XX Best Local Similarity 94.1%; Pred. No. 8.6e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1261 AGCTACAGCCGACCA 1277
DB 1 AGCCACAGCCGACCA 17
XX
XX
XX RESULT 707
XX ADI20873/c
XX ID ADI20873 standard; DNA; 18 BP.
XX
XX
XX ADI20873;
XX
XX
XX 06-MAY-2004 (first entry)
XX
XX

```

```

XX
XX MS SnupB detection oligonucleotide for DD3 #13.
DE
XX
XX DD3; CpG dinucleotide; cell proliferative disorder; ss.
XX
XX
XX Synthetic.
OS
XX
XX WO2004005543-A1.
XX
XX
XX 15-JAN-2004.
XX
XX
XX
XX 25-JUN-2003; 2003WO-EP006690.
XX
XX
XX 08-JUL-2002; 2002DE-01030692.
XX
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX
XX Horns T;
XX
XX
XX WPI, 2004-091385/09.
XX
XX
XX
XX Detecting methylation of 5' and promoter region of DD3 gene for
XX PT diagnosing proliferative disorders comprising contacting target nucleic
XX PT acid with a reagent that distinguishes between methylated and non-
XX PT methylated CpG dinucleotide.
XX
XX
XX Claim 6; SEQ ID NO 76; 56pp; English.
XX
XX
XX
XX The present invention relates to detecting the methylation state of the
XX 5' and promoter region of the gene DD3 within a subject comprising
XX contacting a target nucleic acid having one or more sequences selected
XX from 5 3581 base pair sequences in a biological sample with at least one
XX reagent or a series of reagents. The method is useful for detecting the
XX methylation state of the 5' and promoter region of the gene DD3 within a
XX subject. The set of oligonucleotides comprising at least three of the
XX oligomers is useful for detecting the cytosine methylation state and/or
XX single nucleotide polymorphisms (SNPs) within SEQ. ID NO. 1-5 and its
XX complementary sequences. The set of oligomers is also useful for
XX detecting the methylation state of all CpG dinucleotides within SEQ ID
XX NO. 1 and its complementary sequences. The set of at least two
XX oligonucleotides can be used as primer oligonucleotides for the
XX amplification of DNA sequences selected from SEQ ID NO. 1-5 and its
XX complementary sequences. The DNA- and/or PNA-array is useful for
XX analysing diseases associated with the methylation state of the gene DD3
XX comprising at least one nucleic acid. The methods, nucleic acids,
XX oligonucleotide or PNA-oligomer, kit, array or the set of
XX oligonucleotides is useful for the characterization, classification,
XX differentiation, grading, staging, and/or diagnosis of cell proliferative
XX disorders, or the predisposition to cell proliferative disorders. The present
XX sequence represents a detection oligonucleotide of the invention.
XX
XX
XX Sequence 18 BP; 2 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
SQ
XX
XX
XX Query Match 0.3%; Score 15.4; DB 1; Length 18;
XX Best Local Similarity 94.1%; Pred. No. 8.6e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 5389 AATTAAAAAATACAA 5405
DB 17 AATTAAAAAATACAA 1
XX
XX
XX RESULT 708
XX ADQ8986/c
XX ID ADQ8986 standard; DNA; 18 BP.
XX
XX
XX ADQ8986;
XX
XX
XX 23-SEP-2004 (first entry)
XX
XX
XX Breast cancer associated polymorphism detection primer #84.
XX
XX

```


KM cytostatic; gene therapy; breast cancer; polymorphism detection; PCR;
 KM primer; ss; extension primer.
 XX Homo sapiens.
 XX MO2004055196-A2.
 XX
 PD 01-JUL-2004.
 XX
 XX 25-NOV-2003; 2003MO-US037831.
 XX
 XX 25-NOV-2002; 2002US-0429136P.
 PR 24-JUL-2003; 2003US-0490234P.
 XX
 XX (SEQU-) SEQUENOM INC.
 XX
 XX Roth RB, Nelson MR, Braun A, Kammerer SM, Reneland R;
 PI WPI; 2004-517424/49.
 XX
 XX Identifying a subject at risk of breast cancer comprises detecting the
 PT presence or absence of one or more polymorphic variations associated with
 PT breast cancer in a nucleic acid sample from a subject.
 XX
 XX Example 2; Page 61; 83pp; English.
 XX
 XX The invention describes a method of identifying (M1) a subject at risk of
 CC breast cancer. The method comprises detecting the presence or absence of
 CC one or more polymorphic variations associated with breast cancer in a
 CC nucleic acid sample from a subject. The methods, nucleic acids, proteins,
 CC and compositions are useful for diagnosing, preventing, and treating
 CC breast cancer. Also described is a method useful for identifying
 CC candidate therapeutics for treating breast cancer. This sequence
 CC represents an extension primer used to analyse polymorphisms associated
 CC with breast cancer.
 XX
 XX Sequence 18 BP; 6 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
 SQ
 XX
 XX Query Match 0.3%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 8.6e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3899 AGATTGAATTCTGTGTG 3915
 Db 17 AGAGTGAATTCTGTGTG 1
 XX
 XX RESULT 709
 AAT09139
 ID AAT09139 standard; DNA; 19 BP.
 XX
 AC AAT09139;
 XX
 DT 02-AUG-1996 (first entry)
 XX
 DE HTLV-1/tax construct sense primer binds bases 718-737.
 XX
 XX Suppression; nuclear factor kappa-B; primer; septic shock; cytokine;
 KM immune response; retrovirus; infection; HIV; antisense; translation; ss.
 XX
 XX Synthetic.
 OS
 XX Key Location/Qualifiers
 PH 17. .18
 FT misc_feature
 FT /tag= b
 FT /note= "internucleotide phosphothioate linkage"
 FT misc_feature 18. .19
 FT /tag= c
 FT /note= "internucleotide phosphothioate linkage"
 FT
 XX
 XX MO9535032-A1.
 XX
 XX 28-DEC-1995.

XX
 XX 19-AUG-1994; 94MO-US009350.
 PF
 XX 20-AUG-1993; 93US-00110161.
 PR
 XX (SCRI) SCRIPPS RES INST.
 XX
 XX Nerenberg MI, Kitajima I;
 PI WPI; 1996-058150/06.
 DR
 XX
 XX New anti-sense oligo:nucleotide(s) against nuclear factor-kappa B subunit
 PT mRNA - used to suppress NF-kB dependent processes in individuals, e.g.
 PT septic shock.
 PT
 XX
 XX Example 1; Page 15; 52pp; English.
 PS
 XX
 XX The oligonucleotide AAT09138-40 were used in an assay to test for
 CC inhibition of translation of the tax protein and transactivation of the
 CC HTLV-1 long terminal repeat (LTR) in a HTLV-1 LTR/tax construct in mouse
 CC fibroblastic tumours generated in transgenic mice overexpressing the tax
 CC protein. The oligonucleotides acts to suppress tax protein translation of
 CC which cannot then activate the HTLV-1 LTR and leading to a suppression of
 CC potential tumourigenic growth of cells. This sense oligonucleotide
 CC corresp. to bases 718-737 of an HTLV-1 LTR/tax construct (see Nerenberg
 CC et al., Science, 237: 1324 (1987)). Similarly a novel method of
 CC suppressing nuclear factor kappa-B (NF-kB) dependent processes such as
 CC septic shock or disorders mediated by immune or cytokine responses or
 CC retroviral infections, partic. HIV, comprises novel antisense
 CC oligonucleotides (AAT09134-7) targeted to translational start site
 CC sequences (AAT09130-3) of NF-kB such that translation from the start site
 CC on the NF-kB mRNA is prevented
 XX
 XX Sequence 19 BP; 3 A; 9 C; 2 G; 5 T; 0 U; 0 Other;
 SQ
 XX
 XX Query Match 0.3%; Score 15.4; DB 1; Length 19;
 Best Local Similarity 94.1%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 4066 TTCCAAATGCGCCACTT 4082
 Db 2 TTCCACATGCGCCACTT 18
 XX
 XX RESULT 710
 AAT09138/c
 ID AAT09138 standard; DNA; 19 BP.
 XX
 AC AAT09138;
 XX
 DT 02-AUG-1996 (first entry)
 XX
 DE HTLV-1/tax construct antisense primer binds bases 718-737.
 XX
 XX Suppression; nuclear factor kappa-B; primer; septic shock; cytokine;
 KM immune response; retrovirus; infection; HIV; antisense; translation; ss.
 XX
 XX Synthetic.
 OS
 XX Key Location/Qualifiers
 PH 11. .13
 FT misc_feature
 FT /tag= a
 FT /note= "translational initiation codon"
 FT 17. .18
 FT misc_feature
 FT /tag= b
 FT /note= "internucleotide phosphothioate linkage"
 FT misc_feature 18. .19
 FT /tag= c
 FT /note= "internucleotide phosphothioate linkage"
 FT
 XX
 XX MO9535032-A1.
 XX
 XX 28-DEC-1995.

```

XX 19-AUG-1994; 94WO-US009350.
XX
XX 20-AUG-1993; 93US-00110161.
XX
XX (SCRI ) SCRIPPS RES INST.
XX
XX Nerenberg MI, Kitajima I;
XX
XX MPI; 1996-058150/06.
XX
XX New anti:sense oligo:nucleotide(s) against nuclear factor-kappa B subunit
XX mRNA - used to suppress NF-kB dependent processes in individuals, e.g.
XX septic shock.
XX
XX Example 1; Page 15; 52pp; English.
XX
XX The oligonucleotide primers AAT09138-40 were used in an assay to test for
XX inhibition of translation of the tax protein and transactivation of the
XX HTLV-1 long terminal repeat (LTR) in a HTLV-1 LTR/tax construct in mouse
XX fibroblastic tumours generated in transgenic mice overexpressing the tax
XX protein. The oligonucleotides acts to suppress tax protein translation
XX which cannot then activate the HTLV-1 LTR and leading to a suppression of
XX potential tumourigenic growth of cells. This antisense oligonucleotide is
XX targeted to bases 718-737 of an HTLV-1 LTR/tax construct (see Nerenberg
XX et al., Science, 237: 1324 (1987)). Similarly a novel method of
XX suppressing nuclear factor kappa-B (NF-kB) dependent processes such as
XX septic shock or disorders mediated by immune or cytokine responses or
XX retroviral infections, partic. HIV, comprises novel antisense
XX oligonucleotides (AAT09134-7) targeted to translational start site
XX sequences (AAT09130-3) of NF-kB such that translation from the start site
XX on the NF-kB mRNA is prevented
XX
XX Sequence 19 BP; 5 A; 2 C; 9 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 15.4; DB 1; Length 19;
XX Best Local Similarity 94.1%; Pred. No. 8.7e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 4066 TTCCAAATGCGCCACTT 4082
XX 18 TTCCACTGCGCCACTT 2
XX
XX RESULT 711
XX AAT46087
XX ID AAT46087 standard; DNA; 19 BP.
XX
XX AAT46087;
XX
XX 19-FEB-1997 (first entry)
XX
XX Primer for STS associated with EDA gene.
XX
XX STS; sequence-tagged site; primer; EDA; anhidrotic ectodermal dysplasia;
XX yeast artificial chromosome; Homo sapiens; ss.
XX
XX Synthetic.
XX
XX US5556786-A.
XX
XX 17-SBP-1996.
XX
XX 27-APR-1993; 93US-00052997.
XX
XX 27-APR-1993; 93US-00052997.
XX
XX (UNIW ) UNIV WASHINGTON.
XX
XX De La Chapelle A, Kere J, Schlessinger D;
XX
XX MPI; 1996-432990/43.
XX

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PT Cloning vector contg. the human anhidrotic ecto-dermal dysplasia gene -
PT for diagnosis of EDA related diseases.
XX
XX Claim 5; Col 28; 19pp; English.
XX
XX EDA is an X-chromosomal recessive disorder linked with the absence or
XX hypoplasia of hair, teeth and sweat glands. The EDA gene has been mapped
XX to Xq12-q13 by genetic linkage analysis using restriction fragment length
XX polymorphisms (RFLP) markers. Translocation breakpoints were also used to
XX define the localization of the gene as well as the recovery of yeast
XX artificial chromosome (YAC) clones from the region using RFLP markers and
XX new unique markers. AAT46079-92 are primers for sequence-tagged sites
XX associated with the anhidrotic ectodermal dysplasia (EDA) gene. AAT46083-
XX 92 are associated with new markers labelled SWXD632, SWXD178, SWXD634,
XX SWXD635 and SWXD636
XX
XX Sequence 19 BP; 4 A; 10 C; 0 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 15.4; DB 1; Length 19;
XX Best Local Similarity 94.1%; Pred. No. 8.7e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 339 TTTCCTACCACTCCGCC 355
XX 2 TTTCCTACCACTCCACC 18
XX
XX RESULT 712
XX AAV01290/c
XX ID AAV01290 standard; DNA; 19 BP.
XX
XX AAV01290;
XX
XX 23-MAR-1998 (first entry)
XX
XX Transhyretin PCR primer for universal mammalian STS's.
XX
XX PCR primer; polymerase chain reaction; amplification; UM-STs;
XX universal mammalian sequence tagged site; genomic map; clone; ss.
XX
XX Synthetic.
XX
XX WO9731012-A1.
XX
XX 28-AUG-1997.
XX
XX 18-FEB-1997; 97WO-US002403.
XX
XX 22-FEB-1996; 96US-0012061P.
XX
XX (UNMI ) UNIV MICHIGAN.
XX (UNMS ) UNIV MICHIGAN STATE.
XX
XX Brewer GJ, Venta PJ, Yuzbasiyan-Gurkan V;
XX
XX MPI; 1997-435083/40.
XX
XX New oligonucleotide primers amplifying gene regions conserved among
XX mammals - useful for developing genomic maps, isolating clones and making
XX cross-species comparisons.
XX
XX Claim 1; Page 11; 26pp; English.
XX
XX The present sequence represents a specifically claimed oligonucleotide
XX PCR primer. The oligonucleotide can be used for polymerase chain reaction
XX (PCR) amplification of DNA, specifically regions of specific genes that
XX are conserved among mammalian species, i.e. pairs of oligonucleotides
XX from the present specification represent universal mammalian sequence-
XX tagged site (UM-STs) primers. The primers are used to develop genomic
XX maps, to isolate clones from libraries, to make cross-species comparisons
XX and to develop additional genetic markers. UM-STs allow genomic
XX comparisons to be made between more species
XX

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```

SQ      Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
Query Match      0.3%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY      5146 GGAACCATTTGGCTCTCG 5162
DB      17 GGAGCCATTGGCTCTCG 1
RESULT 713
AAT63656/C
ID      AAT63656 standard; DNA; 19 BP.
XX
XX      AAT63656;
AC
XX
XX      06-JUN-1997 (first entry)
DT
XX
XX      Oligo disclosed in patent about Anti-HTLV antisense therapy.
DE
XX      antisense; complementary; tax gene; inhibic; HTLV-1;
KW      human T-cell lymphotropic virus type 1; viral antigen expression; ss.
XX      human T-cell lymphotropic virus type 1; viral antigen expression; ss.
OS      Synthetic.
XX
XX      JP09052898-A.
PN
XX
XX      25-FEB-1997.
PD
XX
XX      09-AUG-1995; 95JP-00224606.
PF
XX
XX      09-AUG-1995; 95JP-00224606.
PR
XX
XX      09-AUG-1995; 95JP-00224606.
PA
XX      (SOYA-) SOYAKU GIJUTSU KENKYUSHO KK.
DR
XX      WPI; 1997-197252/18.
XX
XX      Anti-HTLV-1 anti-sense oligo:nucleotide - is complementary to region of
PT      tax gene from human T-cell lymphotropic virus type 1 and inhibits viral
PT      tax gene expression.
XX
XX      Disclosure; Page 9; 10pp; Japanese.
PS
XX
XX      Oligonucleotides having a partial sequence consisting of at least 15
CC      bases of AAT63641 (an antisense oligo complementary to a region of the
CC      tax gene which can inhibit human T-cell lymphotropic virus type 1 (HTLV-
CC      1) viral antigen expression) are claimed. In an example, six antisense
CC      oligos were designed. T1-T6 (AAT63650-55) and were compared to six oligos
CC      derived from other regions of HTLV-1, i.e. S1 (splice junction), P1
CC      (p21), R1 (rex), R1 (rex response element), E1 (env) and G1 (gag), four
CC      reference oligonucleotides TIS (tax-sense), HC (dc20), HT (dt20) and
CC      reference oligonucleotides TIS (tax-sense), HC (dc20), HT (dt20) and
CC      expression inhibiting test. Oligonucleotide T1 gave the best results. The
CC      present sequence is an oligonucleotide disclosed in the specification
XX
XX
XX      Sequence 19 BP; 5 A; 2 C; 9 G; 3 T; 0 U; 0 Other;
SQ
Query Match      0.3%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY      4066 TTCCAAATGCGCCACTT 4082
DB      18 TTCCAAATGCGCCACTT 2
RESULT 714
AAV05874
ID      AAV05874 standard; DNA; 19 BP.
XX
XX      AAV05874;
AC
XX

```

DT	01-JUN-1998	(first entry)
XX	745	
DE	Primer #5 for STS locus DXS339.	
XX		
KW	Human; anhidrotic ectodermal dysplasia; X chromosome; genetic linkage;	
KM	translocation; CGP island; foetal development; hair; sweat gland; ss;	
KW	tooth; primer; PCR; amplification; sequence tagged site; STS.	
XX		
OS	Synthetic.	
OS	Homo sapiens.	
XX		
PN	US5700926-A.	
XX		
PD	23-DEC-1997.	
XX		
PF	22-JUL-1996; 96US-00684672.	
XX		
PR	27-APR-1993; 93US-00052997.	
XX		
PA	(UNIM) UNIV WASHINGTON.	
PI	De la Chapelle A, Srivastava AK, Kere J, Schlessinger D;	
XX		
DR	WPI, 1998-062436/06.	
PT	Human anhidrotic ectodermal dysplasia gene - useful for research into	
PT	hair growth.	
PS	Disclosure; Col 7; 37pp; English.	
XX		
CC	Primers AAV05858-V05879 were used to PCR amplify sequence tagged sites	
CC	(STS's) in the search for the sequence encoding the human anhidrotic	
CC	ectodermal dysplasia (EDA) gene (AAV05851). This primer is used to	
CC	amplify the STS at locus DXS339. The amplified fragments can be used as	
CC	probes for isolating the EDA gene. The EDA gene has been mapped to the	
CC	region Xq12-q13 by genetic linkage analysis and has been shown to contain	
CC	a 300 kb intron inserted in the 3' end of the coding sequence.	
CC	Deficiencies in the gene are observed by translocations with a breakpoint	
CC	in the transcribed Cpg island 3 at the Xq12-q13 locus. The EDA gene can	
CC	be used to study the dynamics of EDA gene expression during foetal	
CC	development, and processes affecting normal hair growth in adults. The	
CC	EDA gene can also be used to study hair, sweat gland and tooth formation	
CC	and growth, and ectodermal dysplasias	
XX		
SQ	Sequence 19 BP; 4 A; 10 C; 0 G; 5 T; 0 U; 0 Other;	
	Query Match 0.3%; Score 15.4; DB 1; Length 19;	
	Best Local Similarity 94.1%; Pred. No. 8.7e+02;	
	Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0.	
QY	339 TTTCTACCACTCCGCC 355	
DB	2 TTTCTACCACTCCACC 18	
	RESULT 715	
	AAK52863	
ID	AAK52863 standard; DNA; 19 BP.	
AC	AAK52863;	
XX		
DT	30-JUN-1999 (first entry)	
XX		
DE	Human genome diallelic marker primer 220.	
XX		
KW	Biallelic marker; human, high density disequilibrium map; disease; trait;	
KW	identical; Alzheimer's disease; drug response; drug efficacy;	
KW	drug toxicity; primer; ss.	
XX		
OS	Synthetic.	
OS	Homo sapiens.	
XX		
FN	W09904038-A2.	

```
XX 28-JAN-1999.
PD
XX
XX 17-JUL-1998; 98WO-IB001193.
PF
XX
XX 18-JUL-1997; 97EP-00401740.
PR 21-APR-1998; 98US-0082614P.
XX
XX (GEST ) GENSET.
XX
XX Cohen D, Blumenfeld M, Tchounmakov I;
PI WPI; 1999-132278/11.
XX
XX Production of biallelic markers - by obtaining a genomic DNA library,
PT determining the order and sequence of DNA fragments and identifying
PT nucleotides which vary between individuals.
XX
XX Claim 137; Page 286; 288pp; English.
XX
XX This invention describes a novel method for obtaining a set of biallelic
CC markers represented in AAX52533-X52632 and AAX52833-X52843 for use in
CC constructing a high density equilibrium map of the human genome. The
CC method involves (a) obtaining a nucleic acid library comprising genomic
CC DNA fragments comprising the full genome or a portion (b) determining the
CC order of genomic DNA fragments in the genome, (c) determining the
CC sequence of selected regions of the genomic DNA fragments and (d)
CC identifying nucleotides in the genomic DNA fragments which vary between
CC individuals, thereby defining a set of biallelic markers. The methods can
CC be used for identifying traits such as disease (e.g. Alzheimer's
CC disease), drug response, drug efficacy and drug toxicity. They can be
CC used for selecting an individual for inclusion in a clinical trial. The
CC method is used to map the position of genes in a genome (preferably the
CC human genome). The sequences described in AAX52633-X52832 and AAX52844-
CC X52868 represent primers used in the method of the invention
XX
XX Sequence 19 BP; 6 A; 4 C; 8 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 910 CAGGGCTCAGAGGAG 926
DB 1 CAGGGCTCAGAGGAG 17
RESULT 716
AAH6302/C
ID AAH6302 standard; DNA; 19 BP.
XX
XX AAH6302;
AC
XX
XX 04-DEC-2000 (first entry)
DT
XX
XX PCBA HH ribozyme binding site #34.
DE
XX
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
XX Mammalia.
XX
XX WO200032765-A2.
PN
XX
XX 08-JUN-2000.
PD
XX
XX 06-DEC-1999; 99WO-US028772.
PF
XX
XX 04-DEC-1998; 98US-0110954P.
PR
XX
XX (IMMU-) IMMUSOL INC.
PA
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
PI
XX
```

```
DR WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1.
XX
XX Disclosure; Page 105; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAH82415 to AAH86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells. The
CC ribozyme is resistant to endonuclease activity and hence is efficient in
CC restenosis treatment
XX
XX Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2328 CACCTTCTTGAGATCG 2344
DB 19 CACCTTCTTGAGATCG 3
RESULT 717
AAH61464/C
ID AAH61464 standard; DNA; 19 BP.
XX
XX AAH61464;
AC
XX
XX 10-SEP-2001 (first entry)
DT
XX
XX PCNA HH ribozyme binding site SEQ ID NO:3888.
DE
XX
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnery;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; vitreous;
KW antiproliferative; dermatological; antiseborrheic; antidiabetic; vitruide;
KW anti-sclerotic; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seboreic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
XX Homo sapiens.
XX
XX Synthetic.
OS
XX
XX WO200130362-A2.
PN
XX
XX 03-MAY-2001.
PD
XX
XX 26-OCT-2000; 2000WO-US029500.
PF
XX
XX 26-OCT-1999; 99US-0161532P.
PR
XX
XX (IMMU-) IMMUSOL INC.
PA
XX
XX Robbins JM, Tritz R;
PI
XX
XX WPI; 2001-300427/31.
DR
XX
XX Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
XX Example 1; Page 354; 408pp; English.
XX
XX The present invention describes a method for treating a proliferative
CC
```

CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (i) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (ii) comprising a promoter operably linked to a
CC nucleic acid segment encoding (i). (i) can have antipsoriatic,
CC dermatological, cytostatic, keratolytic and vincristine activities, and
CC ophthalmological, vulvarectal, antiseborrheic, anti-diabetic, anti-sclerotic,
CC cleaves RNA encoding cytokine involved in inflammation. (i) can be used
CC in gene therapy. (i) and (ii) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
CC
XX

SO Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2328 CACCTCTGAGATGG 2344

DB 19 CACCTCTGAGATGG 3

RESULT 718

ADG35660

ID ADG35660 standard; RNA; 19 BP.

AC ADG35660;

DT 26-FEB-2004 (first entry)

XX HIV siNA oligonucleotide SEQ ID NO:503.

XX RNA interference; short interfering nucleic acid; siNA;
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
XX short hairpin RNA; shRNA; expression modulation; gene therapy;
XX drug screening; diagnosis; therapeutic target identification;
XX pharmacogenomics; gene function analysis; gene mapping; HIV; anti-HIV;
XX HIV replication inhibition; HIV infection; ss; target sequence.

OS Synthetic.

OS Human immunodeficiency virus 1.

PN WO2003070193-A2.

PD 28-AUG-2003.

PF 20-FEB-2003; 2003WO-US005190.

PR 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 22-APR-2002; 2002US-0374722P.

PR 29-MAY-2002; 2002US-00157580.

PR 06-JUN-2002; 2002US-0386782P.

PR 23-JUL-2002; 2002US-0398036P.

PR 21-AUG-2002; 2002US-0225023.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

(SIRN-) SIRNA THERAPEUTICS INC.

(MCSW/) MCSWIGGEN J.

McsWiggen J, Belgelman L, Macejak D,

DR WPI; 2003-679850/64.

XX New double-stranded short interfering nucleic acid, useful for treating
XX infection with human immune deficiency virus, comprises sugar-modified
PT pyrimidine bases.

PS Example 3; SEQ ID NO 503; 170bp; English.

XX The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of HIV gene by RNA interference. The siNA may or
CC may not comprise ribonucleotides and may be double or single stranded.
CC They further comprise sense and antisense regions, or alternatively are
CC assembled from a sense oligonucleotide and an antisense oligonucleotide.
CC Specifically, the siNA include short interfering RNA (siRNA), double-
CC stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNA
CC can be unmodified or chemically modified, can contain
CC deoxyribonucleotides, and can be chemically synthesized, expressed from a
CC vector or enzymatically synthesized. The invention also relates to kits
CC for the in vitro or in vivo delivery of siNA, conjugates and/or complexes
CC of siNA, and vectors that express siNA. The siNA are used to modulate
CC expression of the HIV gene in cells, tissue explants or organisms (e.g.,
CC by ex vivo gene therapy), or in grafts and transplants for the treatment
CC of a variety of conditions. HIV siNA have anti-HIV activity. They may be
CC used for inhibiting replication of HIV and may be used to treat HIV
CC infection. The siNA are also useful for drug screening, diagnosis,
CC therapeutic target identification and validation, genetic engineering,
CC pharmacogenomics, studying gene function, and gene mapping (e.g., of
CC single nucleotide polymorphisms). The present sequence represents the
CC upper strand of HIV-targeted double-stranded siNA, which is identical to
CC the HIV transcript target sequence.
XX

SO Sequence 19 BP; 6 A; 9 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1261 AGCCTACAGCCGACCA 1277

DB 2 AGCCTACAGCCGACCA 18

RESULT 719

ADG36398/C

ID ADG36398 standard; RNA; 19 BP.

AC ADG36398;

DT 26-FEB-2004 (first entry)

XX HIV siNA oligonucleotide SEQ ID NO:1241.

XX RNA interference; short interfering nucleic acid; siNA;
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
XX short hairpin RNA; shRNA; expression modulation; gene therapy;
XX drug screening; diagnosis; therapeutic target identification;
XX pharmacogenomics; gene function analysis; gene mapping; HIV; anti-HIV;
XX HIV replication inhibition; HIV infection; ss.

OS Synthetic.

OS Human immunodeficiency virus 1.

PN WO2003070193-A2.

PD 28-AUG-2003.

PF 20-FEB-2003; 2003WO-US005190.

PR 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 22-APR-2002; 2002US-0374722P.

PR 29-MAY-2002; 2002US-00157580.

PR 06-JUN-2002; 2002US-0386782P.

PR 23-JUL-2002; 2002US-0398036P.
PR 21-AUG-2002; 2002US-00225023.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX (MCSW/) MCSWIGGEN J.
XX
XX Mcswiggen J, Beigelman L, Macejak D;
XX
XX WPI; 2003-679850/64.
XX
XX New double-stranded short interfering nucleic acid, useful for treating
PT infection with human immune deficiency virus, comprises sugar-modified
PT pyrimidine bases.
XX
XX
XX Example 3; SEQ ID NO 1241; 170pp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of HIV gene by RNA interference. The siNA may or
CC may not comprise ribonucleotides and may be double or single stranded.
CC They further comprise sense and antisense regions, or alternatively are
CC assembled from a sense oligonucleotide and an antisense oligonucleotide.
CC Specifically, the siNA include short interfering RNA (siRNA), double-
CC stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNA
CC can be unmodified or chemically modified, can contain
CC deoxyribonucleotides, and can be chemically synthesised, expressed from a
CC vector or enzymatically synthesised. The invention also relates to kits
CC for the in vitro or in vivo delivery of siNA, conjugates and/or complexes
CC of siNA, and vectors that express siNA. The siNA are used to modulate
CC expression of the HIV gene in cells, tissue explants or organisms (e.g.,
CC by ex vivo gene therapy), or in grafts and transplants for the treatment
CC of a variety of conditions. HIV siNA have anti-HIV activity. They may be
CC used for inhibiting replication of HIV and may be used to treat HIV
CC infection. The siNA are also useful for drug screening, diagnosis,
CC therapeutic target identification and validation, genetic engineering,
CC pharmacogenomics, studying gene function, and gene mapping (e.g., of
CC single nucleotide polymorphisms). The present sequence represents the
CC lower strand of an HIV-targeted double-stranded siNA.
XX
XX Sequence 19 BP; 0 A; 4 C; 9 G; 0 T; 6 U; 0 Other;
SQ
XX
XX Query Match 0.3%; Score 15.4; DB 1; Length 19;
XX Best Local Similarity 94.1%; Pred. No. 8.7e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1261 AGCCTACAGCCGACCA 1277
DB 18 AGCCACAGCCGACCA 2
RESULT 720
ADJ66971/c
ID ADJ66971 standard; DNA; 19 BP.
XX
XX ADJ66971;
XX
XX 06-MAY-2004 (first entry)
XX
XX RET oligonucleotide microchip-related oligonucleotide SeqID74.
XX
XX RET oligonucleotide microchip; mis-sense mutation; mutation hot spot;
KM RET gene; immobilised; automatic microarrayer; hereditary cancer;
KM multiple internal secretion adenomatosis type 2 syndrome; ss.
XX
XX Unidentified.
OS
XX JP2003156492-A.
XX
XX PD 30-MAY-2003.
XX

PF 19-AER-2002; 2002JP-00117713.
XX
XX 19-NOV-2001; 2001KR-00071774.
XX
XX (NACH-) NAT CANCER CENT.
XX
XX WPI; 2003-692502/66.
XX
XX
XX RET oligonucleotide microchip contains oligonucleotide that can identify
PT missense mutation of mutation hot spot in a RET gene, immobilized to
PT surface of solid substrate by automatic microarrayer.
XX
XX
XX Example 1; SEQ ID NO 74; 25pp; Japanese.
XX
XX
XX This invention relates to a novel RET oligonucleotide microchip which
CC contains an oligonucleotide that can identify mis-sense mutation of a
CC mutation hot spot in a RET gene, immobilised to the surface of a solid
CC substrate by automatic microarrayer. The RET oligonucleotide microchip is
CC useful for identifying mis-sense mutations in a RET gene, and thus for
CC diagnosing hereditary cancers, where the RET gene is a causative gene of
CC multiple internal secretion adenomatosis type 2 syndromes. The RET
CC oligonucleotide chip enables diagnosis of hereditary cancers accurately
CC and economically. The present sequence is that of an oligonucleotide
CC which is related to the RET oligonucleotide microchip of the invention.
XX
XX Sequence 19 BP; 5 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.3%; Score 15.4; DB 1; Length 19;
XX Best Local Similarity 94.1%; Pred. No. 8.7e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1771 TGGGTCTTCAGAGCC 1787
DB 18 TGGGTCTTCAGAGCC 2
RESULT 721
ADJ69619
ID ADJ69619 standard; RNA; 19 BP.
XX
XX ADJ69619;
XX
XX 20-MAY-2004 (first entry)
XX
XX
XX Human PCNA siNA lower strand, SEQ ID NO:78.
XX
XX RNA interference; short interfering nucleic acid; siNA;
KM short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KM short hairpin RNA; shRNA; expression modulation; gene therapy;
KM drug screening; diagnosis; therapeutic target identification;
KM pharmacogenomics; gene function analysis; gene mapping; cancer;
KM restenosis; cytostatic; vasotropic; human;
KM proliferating cell nuclear antigen; PCNA; ss.
XX
XX Homo sapiens.
OS
XX WO2003070896-A2.
XX
XX 28-AUG-2003.
XX
XX 18-FEB-2003; 2003WO-US004738.
XX
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 11-SEP-2002; 2002US-0409785P.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX

PI Mcswigen J, Chowitra B, Belgelman L;
 XX WPI; 2003-712615/67.
 XX
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer and restenosis, downregulates expression of the
 PT proliferating cell nuclear antigen gene.
 XX
 PS Example 3; SEQ ID NO 78; 134pp; English.
 XX
 CC The invention relates to short interfering nucleic acids (siNA) which
 CC downregulate expression of the human proliferating cell nuclear antigen
 CC (PCNA) gene by RNA interference. The siNAs may or may not comprise
 CC ribonucleotides and may be double or single stranded. They further
 CC comprise sense and antisense regions, or alternatively are assembled from
 CC a sense oligonucleotide and an antisense oligonucleotide. Specifically,
 CC the siNA include short interfering RNA (siRNA), double-stranded RNA,
 CC micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be
 CC unmodified or chemically modified, can contain deoxyribonucleotides, and
 CC can be chemically synthesised, expressed from a vector or enzymatically
 CC synthesised. The invention also relates to kits for the in vitro or in
 CC vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors
 CC that express siNA. The siNAs are used to modulate expression of the PCNA
 CC gene in cells, tissue explants or organisms (e.g., by ex vivo gene
 CC therapy), or in grafts and transplants for the treatment of a variety of
 CC conditions. They may be used for treating cancer and restenosis. The
 CC siNAs are also useful for drug screening, diagnosis, therapeutic target
 CC identification and validation, genetic engineering, pharmacogenomics,
 CC studying gene function, and gene mapping (e.g., of single nucleotide
 CC polymorphisms). The present sequence represents the lower strand of a
 CC human PCNA-targeted double-stranded siNA.
 XX
 SQ Sequence 19 BP; 4 A; 4 C; 6 G; 0 T; 5 U; 0 Other;
 Query Match 0.3%; Score 15.4; DB 1; Length 19;
 Best Local Similarity 64.7%; Pred. No. 8.7e+02;
 Matches 11; Conservative 5; Mismatches 1; Indels 0; Gaps 0;
 QY 2328 CACCTTCTTGAGATGG 2344
 DB 1 CACCTTCTTGAGATGG 17
 AC
 XX ADL69550; RNA; 19 BP.
 AC
 XX
 DT 20-MAY-2004 (first entry)
 XX
 DE Human PCNA transcript target sequence/siNA upper strand, SEQ ID NO:9.
 XX
 XX RNA interference; short interfering nucleic acid; siNA;
 KM short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
 KM short hairpin RNA; shRNA; expression modulation; gene therapy;
 KM drug screening; diagnosis; therapeutic target identification;
 KM pharmacogenomics; gene function analysis; gene mapping; cancer;
 KM restenosis; cytostatic; vasotropic; human;
 KM proliferating cell nuclear antigen; PCNA; target sequence; ss.
 XX
 OS Homo sapiens.
 PN WO2003070896-A2.
 PD 28-AUG-2003.
 XX
 PF 18-FEB-2003; 2003MO-US004738.
 XX
 XX 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 11-SEP-2002; 2002US-0409785P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Mcswigen J, Chowitra B, Belgelman L;
 XX WPI; 2003-712615/67.
 XX
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer and restenosis, downregulates expression of the
 PT proliferating cell nuclear antigen gene.
 XX
 PS Example 3; SEQ ID NO 9; 134pp; English.
 XX
 CC The invention relates to short interfering nucleic acids (siNA) which
 CC downregulate expression of the human proliferating cell nuclear antigen
 CC (PCNA) gene by RNA interference. The siNAs may or may not comprise
 CC ribonucleotides and may be double or single stranded. They further
 CC comprise sense and antisense regions, or alternatively are assembled from
 CC a sense oligonucleotide and an antisense oligonucleotide. Specifically,
 CC the siNAs include short interfering RNA (siRNA), double-stranded RNA,
 CC micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be
 CC unmodified or chemically modified, can contain deoxyribonucleotides, and
 CC can be chemically synthesised, expressed from a vector or enzymatically
 CC synthesised. The invention also relates to kits for the in vitro or in
 CC vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors
 CC that express siNA. The siNAs are used to modulate expression of the PCNA
 CC gene in cells, tissue explants or organisms (e.g., by ex vivo gene
 CC therapy), or in grafts and transplants for the treatment of a variety of
 CC conditions. They may be used for treating cancer and restenosis. The
 CC siNAs are also useful for drug screening, diagnosis, therapeutic target
 CC identification and validation, genetic engineering, pharmacogenomics,
 CC studying gene function, and gene mapping (e.g., of single nucleotide
 CC polymorphisms). The present sequence represents the upper strand of a
 CC human PCNA-targeted double-stranded siNA, which is identical to the PCNA
 CC transcript target sequence.
 XX
 SQ Sequence 19 BP; 5 A; 6 C; 4 G; 0 T; 4 U; 0 Other;
 Query Match 0.3%; Score 15.4; DB 1; Length 19;
 Best Local Similarity 94.1%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2328 CACCTTCTTGAGATGG 2344
 DB 19 CACCTTCTTGAGATGG 3
 AC
 XX ADN34160 standard; RNA; 19 BP.
 AC
 XX ADN34160;
 DT 01-JUL-2004 (first entry)
 XX
 DE Upper strand of cyclin D1 targeted double stranded siNA #180.
 XX
 XX short interfering nucleic acid; siNA; cyclin; cytostatic; Vasotropic;
 KM cancer; cell-proliferation disorder; restenosis; drug screening;
 KM genetic engineering; pharmacogenomics; gene mapping;
 KM single nucleotide polymorphisms; ss.
 XX
 OS Homo sapiens.
 PN WO2003072705-A2.
 PD 04-SEP-2003.
 XX
 PF 06-FEB-2003; 2003MO-US003662.

```
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 17-SEP-2002; 2002US-0411275P.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PI Thompson J, Mcswiggen J, Beigelman L;
XX WPI; 2003-689983/65.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer and restenosis, down regulates expression of at least
PT one cyclin gene.
XX
XX Example 3; SEQ ID NO 180; 144pp; English.
XX
XX The present invention relates to a short interfering nucleic acid (siNA)
CC that down regulates expression of at least one cyclin gene by RNA
CC interference. siNA are used to modulate expression of cyclin genes, in
CC cells, tissue explants or organisms, e.g. for treating a wide range of
CC cancers and other cell-proliferation disorders such as restenosis, but
CC also for drug screening, diagnosis, target identification and validation;
CC genetic engineering, pharmacogenomics, studying gene function and gene
CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence
CC represents the upper strand of cyclin D1 targeted double stranded siNA
CC which is identical to the cyclin D1 transcript target sequence.
XX
SQ Sequence 19 BP; 1 A; 2 C; 2 G; 0 T; 14 U; 0 Other;
XX
XX Query Match 0.3%; Score 15.4; DB 1; Length 19;
XX Best Local Similarity 94.1%; Pred. No. 8.7e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 5393 AAAAAATACAAAAAG 5409
DB 18 AAAAACTACAAAAAG 2
XX
RESULT 724
ADN34399
ID ADN34399 standard; RNA; 19 BP.
XX
AC ADN34399;
XX
XX 01-JUL-2004 (first entry)
DT
XX
XX Lower strand of cyclin D1 targeted double stranded siNA #180.
DE
XX
XX short interfering nucleic acid; siNA; cyclin; Cytostatic; Vasotropic;
XX cancer; cell-proliferation disorder; restenosis; drug screening;
XX genetic engineering; pharmacogenomics; gene mapping;
XX single nucleotide polymorphisms; ss.
XX
XX Homo sapiens.
OS
XX
XX WO2003072705-A2.
XX
XX 04-SEP-2003.
XX
XX 06-FEB-2003; 2003WO-US003662.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 17-SEP-2002; 2002US-0411275P.
XX 15-JAN-2003; 2003US-0440129P.
XX
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PR 17-SEP-2002; 2002US-0411275P.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PI Thompson J, Mcswiggen J, Beigelman L;
XX WPI; 2003-689983/65.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer and restenosis, down regulates expression of at least
PT one cyclin gene.
XX
XX Example 3; SEQ ID NO 419; 144pp; English.
XX
XX The present invention relates to a short interfering nucleic acid (siNA)
CC that down regulates expression of at least one cyclin gene by RNA
CC interference. siNA are used to modulate expression of cyclin genes, in
CC cells, tissue explants or organisms, e.g. for treating a wide range of
CC cancers and other cell-proliferation disorders such as restenosis, but
CC also for drug screening, diagnosis, target identification and validation;
CC genetic engineering, pharmacogenomics, studying gene function and gene
CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence
CC represents the lower strand of cyclin D1 targeted double stranded siNA.
XX
SQ Sequence 19 BP; 14 A; 2 C; 2 G; 0 T; 1 U; 0 Other;
XX
XX Query Match 0.3%; Score 15.4; DB 1; Length 19;
XX Best Local Similarity 88.2%; Pred. No. 8.7e+02;
XX Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
QY 5393 AAAAAATACAAAAAG 5409
DB 2 AAAAACTACAAAAAG 18
XX
RESULT 725
AAQ95360
ID AAQ95360 standard; DNA; 20 BP.
XX
AC AAQ95360;
XX
XX 08-FEB-1996 (first entry)
DT
XX
XX Primer B (Group 1, Set C) for marker IGFL, chromosome 12.
DE
XX
XX primer; polymerase chain reaction; PCR; linkage study; locus;
XX microsatellite marker sequence; automated genotyping; allele;
XX polymorphism; detection; Homo sapiens; ss.
XX
XX Synthetic.
OS
XX
XX WO9515400-A1.
XX
XX 08-JUN-1995.
XX
XX 05-DEC-1994; 94WO-US013945.
XX
XX 03-DEC-1993; 93US-00160837.
XX
XX (UYJO ) UNIV JOHNS HOPKINS.
XX
XX Levitt RC;
XX
XX WPI; 1995-215278/28.
XX
XX kit for automated genotyping contg. pairs of PCR primers - designed to
PT amplify polymorphic nucleotide repeat sequences, arranged in sets each
PT with a characteristic fluorescence label, useful e.g. in detection of
XX disease related genetic rearrangement.
XX
XX Claim 3; Fig 7A-2; 104pp; English.
XX
```


CC The method aims to provide a collection of highly reproducible
 CC microsatellite marker sequences (MMS) at approx. 10-50 cm intervals
 CC throughout the human genome which can be detectably labelled. The MMS are
 CC polymorphic, simple sequence repeats and can be used in automated
 CC genotyping, esp. fluorescence-based. The primers correspond to the unique
 CC DNA sequence surrounding each marker, and PCR is used to detect each
 CC polymorphism. When the MMS show considerable polymorphism (ie. a
 CC difference in the number of repeats) between individuals, the markers can
 CC be particularly informative. The MMS can be ideal for linkage studies.
 CC Kits comprise at least 4 groups, of at least 3 sets, each comprising
 CC labelled primers for PCR amplification of the DNA. Group 1 primer pairs
 CC are shown in AA095327-68. The published size range of the IGFI allele is
 CC 176-196 bp, and the degree of heterozygosity in the population is about
 CC 54%
 CC
 SQ Sequence 20 BP, 6 A, 4 C, 7 G, 3 T, 0 U, 0 Other;
 Query Match 0.3%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 4764 ACTCTGGAGAGAGGCA 4780
 |||||
 4 ACTCTGGAGAGAGGTA 20
 DB
 RESULT 726
 AAT27911/C
 ID AAT27911 standard; DNA; 20 BP.
 XX
 AC AAT27911;
 XX
 DT 28-JAN-1997 (first entry)
 XX
 XX 5'-anchored simple sequence repeat primer VDV/(CT)8.5.
 DE
 XX
 XX Detection: polymorphism; perfect compound simple sequence repeat;
 KM adaptor directed primer; genome; genetic; fingerprinting;
 KM amplified fragment length polymorphism assay; microsatellite region;
 KM genetic trait marking; germplasm comparisons; 5'-anchored; ss.
 XX
 OS Synthetic.
 OS
 XX WO9617082-A2.
 PN
 XX
 XX 06-JUN-1996.
 PD
 XX
 XX 21-NOV-1995; 95WO-US015150.
 PF
 XX
 PR 28-NOV-1994; 94US-00346456.
 XX
 PA (DUPO) DU PONT DE NEMOURS & CO E I.
 XX
 PI Morgante M, Vogel JM;
 XX
 XX WPI; 1996-277795/28.
 DR
 XX Modified amplified fragment length polymorphism assay - for detection of
 PT polymorphism esp. in microsatellite regions.
 PT
 XX
 PS Example 1; Page 76; 173pp; English.
 PS
 CC Detecting polymorphisms between 2 nucleic acid samples, esp. in
 CC microsatellite regions, comprises digesting the nucleic acid to generate
 CC fragments, ligating adaptor segments to their ends, amplifying them using
 CC primer directed amplification and comparing the prods. to detect
 CC differences. The primers used in the amplification comprise a primer
 CC consisting of a perfect cpd. simple sequence repeat (SSR), and an adaptor
 CC directed primer, comprising a sequence complementary to an adaptor
 CC segment. The present sequence is an example of a SSR primer, which is
 CC flanked at its 5'-end by degenerate nucleotides. The method represents a
 CC modified amplified fragment length polymorphism assay, which is partic.
 CC useful for genome fingerprinting, i.e. for genetic trait marking and

CC germplasm comparisons
 XX
 SQ Sequence 20 BP, 0 A, 9 C, 0 G, 8 T, 0 U, 3 Other;
 Query Match 0.3%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1181 GAGAGAGAGAGAGAG 1197
 |||||
 20 GAGAGAGAGAGAGAG 4
 DB
 RESULT 727
 AAT27909
 ID AAT27909 standard; DNA; 20 BP.
 XX
 AC AAT27909;
 XX
 DT 28-JAN-1997 (first entry)
 XX
 XX 5'-anchored simple sequence repeat primer BHB(GA)8.5.
 DE
 XX
 XX Detection: polymorphism; perfect compound simple sequence repeat;
 KM adaptor directed primer; genome; genetic; fingerprinting;
 KM amplified fragment length polymorphism assay; microsatellite region;
 KM genetic trait marking; germplasm comparisons; 5'-anchored; ss.
 XX
 OS Synthetic.
 OS
 XX WO9617082-A2.
 PN
 XX
 XX 06-JUN-1996.
 PD
 XX
 XX 21-NOV-1995; 95WO-US015150.
 PF
 XX
 PR 28-NOV-1994; 94US-00346456.
 XX
 PA (DUPO) DU PONT DE NEMOURS & CO E I.
 XX
 PI Morgante M, Vogel JM;
 XX
 XX WPI; 1996-277795/28.
 DR
 XX Modified amplified fragment length polymorphism assay - for detection of
 PT polymorphism esp. in microsatellite regions.
 PT
 XX
 PS Example 1; Page 76; 173pp; English.
 PS
 CC Detecting polymorphisms between 2 nucleic acid samples, esp. in
 CC microsatellite regions, comprises digesting the nucleic acid to generate
 CC fragments, ligating adaptor segments to their ends, amplifying them using
 CC primer directed amplification and comparing the prods. to detect
 CC differences. The primers used in the amplification comprise a primer
 CC consisting of a perfect cpd. simple sequence repeat (SSR), and an adaptor
 CC directed primer, comprising a sequence complementary to an adaptor
 CC segment. The present sequence is an example of a SSR primer, which is
 CC flanked at its 5'-end by degenerate nucleotides. The method represents a
 CC modified amplified fragment length polymorphism assay, which is partic.
 CC useful for genome fingerprinting, i.e. for genetic trait marking and
 CC germplasm comparisons
 XX
 SQ Sequence 20 BP, 8 A, 0 C, 9 G, 0 T, 0 U, 3 Other;
 Query Match 0.3%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1181 GAGAGAGAGAGAGAG 1197
 |||||
 4 GAGAGAGAGAGAGAG 20
 DB

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RESULT 728
AAT65799
ID AAT65799 standard; DNA; 20 BP.
XX
XX AAT65799;
AC
XX
XX 25-MAR-2003 (revised)
DT 17-JUN-1997 (first entry)
XX
XX Primer #2 to amplify repeat sequence marker Mfd1.
DE
XX
XX Polymorphism; repeat sequence; genetic marker; primer; amplification;
KM PCR; polymerase chain reaction; paternity; maternity; human; pedigree;
KM linkage analysis; genetic disease; animal; plant; breeding; locus;
KM hybridisation; chromosome; ds.
XX
XX Synthetic.
OS
XX US5582979-A.
XX
XX 10-DEC-1996.
PD
XX
XX 04-APR-1994; 94US-00222177.
PF
XX 21-APR-1989; 89US-00341562.
XX 05-SEP-1991; 91US-00754351.
PR
XX (MARS-) MARSHFIELD CLINIC.
PA
XX
XX Weber JL;
PI
XX
XX WPI; 1997-042239/04.
XX
XX Detection of polymorphic genetic markers of the form (dC-dA)n(dG-dT)n -
PT using novel nucleic acid mole. as primers.
XX
XX Claim 7; Col 9-10; 186pp; English.
XX
XX The invention relates to the isolation of polymorphic repeat sequences
CC having the sequence (dC-dA)n.(dG-dT)n which can be used as genetic
CC markers. Primers based on these sequences can be used to detect these
CC repeats, especially for use in e.g. paternity or maternity testing, human
CC genetic analysis such as linkage analysis of genetic disease, commercial
CC animal or plant breeding or pedigree analysis. Clones containing the
CC repeat sequences were isolated by hybridisation of chromosome-specific
CC phage libraries with a synthetic poly(dC-dA).(dG-dT) probe. Over 100
CC repeat blocks were isolated. The primers AAT65798-T66047 were used to PCR
CC amplify the inserts from the isolated clones containing the repeat
CC sequences. The primers AAT65798-9 were used to amplify the repeat
CC sequence marker clone Mfd1 (AAT65797). (Updated on 25-MAR-2003 to correct
CC PF field.)
XX
XX Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 4764 ACTCTGGGAGAGGCA 4780
DB 4 ACTCTGGGAGAGGCA 20

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```

KM retroviral packaging system; human; virion protein; expression vector;
XX PCR primer; recombinant; GALV; ss.
XX
XX Synthetic.
OS
XX Gibbon ape leukemia virus.
XX
XX WO9707225-A2.
XX
XX 27-FEB-1997.
PD
XX
XX 21-AUG-1996; 96WO-US013737.
PF
XX 21-AUG-1995; 95US-00517488.
PR
XX (CELL-) CELL GENESYS INC.
PA
XX
XX Finer MH, Dull TJ, Zsebo KM, Cooke K, Farson DA;
PI
XX WPI; 1997-165307/15.
XX
XX High efficiency retroviral packaging system - used to transduce human
PT cells, esp. haematopoietic stem cells, T or B cells with foreign genes.
XX
XX Example 14; Page 92; 157pp; English.
XX
XX This primer is used in the construction of a retroviral packaging plasmid
XX which contain genes encoding GALV gag/pol or envelope protein. The
XX retroviral packaging plasmid is used for the production of high titres of
XX recombinant retroviruses in human cells. The retroviral packaging plasmid
XX comprises a retroviral helper DNA sequence derived from a replication-
XX incompetent retroviral genome that encodes, in trans, all viton proteins
XX required for packaging such a retroviral vector. The helper DNA sequence
XX encodes a ecotropic Moloney murine leukaemia virus (MLLV) or gibbon ape
XX leukaemia virus (GALV) gag and pol; and a xenotropic, amphotropic,
XX ecotropic or polytropic envelope protein. The packaging plasmids,
XX designated KAT plasmids, are used with a second retroviral vector
XX encoding a foreign gene of interest to produce mammalian cells with
XX retroviral supernatants that express, e.g. a hormone, lymphokine, growth
XX factor or coagulation factor. The plasmids are useful in construction of
XX stable cell lines that constitutively produce the retroviral proteins
XX required in trans for the production of retrovirus particles: gag, pol
XX and env. The stable producer cells continue to produce high titre
XX retroviruses indefinitely in the absence of drug selection due to the
XX stable integration of both packaging function and virus vector. The
XX retroviral vector plasmids are constructed with sequences enabling the
XX episomal persistence without the need for stable integration of the
XX vector plasmid. The Env gene determines the host range
XX
XX Sequence 20 BP; 2 A; 2 C; 11 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 4821 CACCAGCCCTTGACCT 4837
DB 19 CACCAGCCCATGACCT 3

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RESULT 729
AAT97382/c
ID AAT97382 standard; DNA; 20 BP.
XX
XX AAT97382;
AC
XX
XX 23-MAR-1998 (first entry)
DT
XX
XX Construction of a GALV retroviral packaging plasmid using primer 2.
DE
XX

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RESULT 730
AAT92764/c
ID AAT92764 standard; DNA; 20 BP.
XX
XX AAT92764;
AC
XX
XX 05-FEB-1998 (first entry)
DT
XX
XX Primer #1 for immunoglobulin kappa variable region Vkappa1-2.
DE
XX
XX PCR primer; amplify; human gene; chimeric non-human animal; antibody;
KM transgenic mouse; chromosome fragment; hybridoma production; microcell;
KM Huntingdon's disease gene; pluripotent cell; interleukin-2 gene;
KM myeloma cell; immunoglobulin; variable region; ss.

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XX OS Synthetic.
XX OS Homo sapiens.
XX PN MO9707671-A1.
XX PD 06-MAR-1997.
XX PF 29-AUG-1996; 96MO-JP002427.
XX PR 29-AUG-1995; 95JP-00242340.
XX PR 15-FEB-1996; 96JP-00027940.
XX PA (KIRI ) KIRIN BEER KK.
XX PI Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I,
XX DR WPI; 1997-178822/16.
XX PT Chimeric animal containing foreign chromosome - for expression of a
XX PT foreign gene, e.g. an antibody.
XX PS Example 1; Page 21; 142pp; Japanese.
XX CC AAT92758-T92817 represent amplification primers for human genes which are
XX CC used in the chimeric non-human animal of the invention. The chimeric non-
XX CC human animal of the invention, preferably a mouse, contains a foreign
XX CC chromosome(s) or chromosome fragment. The animal is produced by obtaining
XX CC a hybrid cell by fusion of a cell containing the foreign chromosome with
XX CC a cell having the ability to form microcells. The microcells are
XX CC prepared, and fused with cells having differentiative pluripotency to
XX CC form cells having differentiative pluripotency and containing the foreign
XX CC chromosome. These cells are then introduced into an embryo, which is then
XX CC implanted and brought to term. The foreign chromosome segment is at least
XX CC 1 Mb long and preferably contains a region for an antibody. The
XX CC chromosome segment could also contain genes associated with human
XX CC disease, such as the Interleukin-2 gene, and the Huntington's disease
XX CC gene. The expression of foreign genes (especially human genes) in a non-
XX CC human animal is useful for efficient production of proteins, especially
XX CC of human antibodies. Particular cells of the chimeric animal which
XX CC express the foreign genetic material can be isolated and fused with
XX CC myeloma cells to produce hybridomas capable of expressing the foreign
XX CC gene (e.g. to produce the antibody)
XX SQ Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
SQ Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 865 GCAGTGTCTAATGCCCTG 861
DB 20 GCACTGTCTAATGCCCTG 4
RESULT 731
AAV49811
ID AAV49811 standard; cDNA; 20 BP.
XX AC AAV49811;
XX DT 04-NOV-1998 (first entry)
XX DE ADNF-III PCR primer #3.
XX XX Activity dependent neurotrophic factor III; ADNF-III; ADNF; cell death;
XX XX activity dependent neuroprotective protein; neurone; excitotoxicity;
XX XX spinal cord; hippocampus; cerebral cortex; cholinergic; beta-amyloid;
XX XX N-methyl-D-aspartate; Alzheimer's disease; human immunodeficiency virus;
XX XX HIV infection; PCR primer; 88.
XX OS Synthetic.
XX OS Homo sapiens.

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XX OS Mus sp.
XX PN MO9835042-A2.
XX PD 13-AUG-1998.
XX PF 06-FEB-1998; 98MO-US002485.
XX PR 07-FEB-1997; 97US-0037404P.
XX PA (USSH ) US SEC HEALTH & HUMAN SERVICES.
XX PI Gozes I, Breneman DE, Bassem M;
XX DR WPI; 1998-447239/38.
XX PT Activity dependent neurotrophic factor III polypeptide - useful
XX PT therapeutically to prevent neuronal cell death associated with e.g. HIV
XX PT infection, excitotoxicity or Alzheimer's disease.
XX PS Claim 10; Page 5; 121pp; English.
XX CC AAV49809-V49811 are PCR primers used in the amplification of a novel
XX CC activity dependent neurotrophic factor III, ADNF-III (also known as
XX CC activity dependent neuroprotective protein, ADNP). ADNF III polypeptides
XX CC can be used to prevent neuronal cell death, of e.g. the spinal cord,
XX CC hippocampal, cerebral cortical or cholinergic neurones associated with
XX CC e.g. HIV infection, excitotoxicity induced by N-methyl-D-aspartate
XX CC stimulation or beta-amyloid peptide in Alzheimer's disease. The
XX CC polypeptides can also be combined with a carrier to alleviate learning
XX CC impairment produced by cholinergic blockade in Alzheimer's patients. The
XX CC nucleic acids are useful in polypeptide production and to detect ADNF III
XX CC polynucleotide in biological samples, while the antibodies are useful
XX CC therapeutically and to isolate ADNF III polypeptides
XX SQ Sequence 20 BP; 9 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
SQ Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3305 ACCTGCAGCAGAACAC 3321
DB 1 ACCTGCAGCAGAACAC 17
RESULT 732
AAV52761/c
ID AAV52761 standard; DNA; 20 BP.
XX AC AAV52761;
XX DT 27-NOV-1998 (first entry)
XX DE Immunoglobulin kappa variable PCR primer VK1-2 #1.
XX XX Pluripotent cell; intrinsic gene; chimeric non-human animal;
XX XX construction; human; antibiotic gene; cancer cell; embryonic; PCR primer;
XX XX 88.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN MO9837757-A1.
XX PD 03-SEP-1998.
XX PF 02-MAR-1998; 98MO-JP000860.
XX PR 28-FEB-1997; 97JP-00062309.
XX PA (KIRI ) KIRIN BEER KK.
XX XX

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PI Tomizuka K, Yoshida H, Hanaoka K, Oshimura M, Ishida I;
 XX WPI; 1998-480821/41.
 XX Pluripotent cells containing foreign chromosomes or fragments - and non-
 PT human chimeric animals constructed using them and expressing foreign
 PT genes such as human antibiotic genes.
 XX Example 1; Page 34; 21pp; Japanese.
 XX
 CC The present invention describes a method of obtaining pluripotent cells
 CC containing foreign chromosomes or their fragments (preferably at least
 CC 670 kb in length, especially more than 1000 kb) by preparing at least
 CC cells containing the foreign chromosomes or fragments, then fusing these
 CC with pluripotent cells such as embryonic stem cells, embryonic
 CC reproductive cells, embryonic cancer cells or their mutants. Also
 CC described are: (1) a method of obtaining hybridoma cells by fusing a cell
 CC with a high ability to produce hybridoma cells (such as mouse A9 cells)
 CC with a cell containing the foreign chromosomes or fragments (such as
 CC normal human diploid cells); (2) a method of utilizing pluripotent cells
 CC to produce chimeric and transgenic non-human animals (especially mammals
 CC such as mice) which can express the foreign chromosomes or fragments
 CC introduced; and (3) chimeric animals, their offspring and tissues and
 CC cells derived from the offspring produced by a method as in (2). The
 CC inventions can be used for the production of monoclonal antibodies for
 CC medical use which are of human type and therefore not antigenic in
 CC humans. They can also be used in the production of chimeric and
 CC transgenic animals which express useful foreign proteins, or which can
 CC serve as models for the study of human diseases. AAV52755 to AAV52828 are
 CC PCR primers used in examples from the present invention
 XX
 SQ Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
 QY
 Query Match 0.3%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Db 865 GCAGTGTATGCGCTG 881
 20 GCAGTGTATGCGCTG 4
 RESULT 733
 AAX79722
 ID AAX79722 standard; DNA; 20 BP.
 XX
 AC AAX79722;
 XX
 DT 17-AUG-1999 (first entry)
 XX
 DE PCR primer L5582 for mitochondrial DNA analysis.
 XX
 DE PCR primer; human; mitochondrial DNA; genetic diagnosis;
 KW adult disease contraction; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN JP11113597-A.
 PD 27-APR-1999.
 XX
 PF 13-OCT-1997; 97JP-00279127.
 XX
 PR 13-OCT-1997; 97JP-00279127.
 XX
 PA (TANA/) TANAKA M.
 XX
 DR WPI; 1999-320841/27.
 XX
 PT Genetic diagnosis using human mitochondrial DNA - comprises detecting
 PT base replacements.
 XX

PS Example 2; Page 5; 15pp; Japanese.
 XX
 CC This sequence represents a PCR primer that can be used in the method of
 CC the invention. The method is for genetic diagnosis using human
 CC mitochondrial DNA where there is at least one base replacement from among
 CC the following five replacements: the 3010th base is changed from guanine
 CC to adenine; the 4883rd base from cytosine to thymine; the 5178th base
 CC from cytosine to adenine; the 8414th base from cytosine to thymine; and
 CC the 14668th base from cytosine to thymine. The method can be used for
 CC diagnosing the probability of contracting adult diseases. A confirmation
 CC of base replacement can give a diagnosis of the level of probability of
 CC contraction of adult diseases
 XX
 SQ Sequence 20 BP; 9 A; 5 C; 4 G; 2 T; 0 U; 0 Other;
 QY
 Query Match 0.3%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Db 3070 ACAGCTGAGACTGCNA 3086
 1 ACAGCTGAGACTGCNA 17
 RESULT 734
 AAX93323
 ID AAX93323 standard; DNA; 20 BP.
 XX
 AC AAX93323;
 XX
 DT 13-SEP-1999 (first entry)
 XX
 DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
 XX
 DE Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
 KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
 KW neutralising epitope; PCR primer; ss.
 XX
 OS Synthetic.
 OS Chlamydia pneumoniae.
 XX
 PN WO927105-A2.
 PD 03-JUN-1999.
 XX
 PF 20-NOV-1998; 98WO-1B001890.
 XX
 PR 21-NOV-1997; 97PR-00014673.
 PR 04-NOV-1998; 98US-0107078P.
 XX
 PA (GEST) GENSET.
 XX
 PI Griffais R;
 XX
 DR WPI; 1999-357842/30.
 XX
 PT Genome sequence of Chlamydia pneumoniae.
 XX
 PS Page 1580; Disclosure; 1912pp; English.
 XX
 CC AAX91991-X97517 represent PCR primers used to amplify open reading frames
 CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
 CC (see AAX91990). C. pneumoniae causes respiratory disease such as
 CC pneumonia and bronchitis and is thought to be a contributing factor in
 CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
 CC nodosum or pharyngitis. The polypeptides encoded by the open reading
 CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
 CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
 CC nucleotide sequences can also be used as immunogenic compositions,
 CC especially where the vector directs the expression of a neutralising
 CC epitope of C. pneumoniae
 XX
 SQ Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 604 CTGCGCATTAAGCGCA 620
 |||||
 Db 3 CTGCTCATTAAGCGCA 19

RESULT 735
 AAA55807
 ID AAA55807 standard; DNA; 20 BP.
 XX
 AC AAA55807;
 XX
 DT 01-SBP-2000 (first entry)
 XX
 DE Human histone deacetylase HD2 antisense oligonucleotide SEQ ID NO:52.
 XX
 KM Human; DNA methyltransferase; DNA Methylase; antisense oligonucleotide;
 KM modulation; inhibition; gene expression; combination therapy; p16;
 KM histone deacetylase; HDAC; thymidylate synthase; tumour suppressor;
 KM methylation; gene therapy; tumour; cytostatic; antiasthmatic;
 KM antiinflammatory; inflammation; asthma; ss.
 XX
 OS Homo sapiens.
 XX
 PN MO200023112-A1.
 XX
 PD 27-APR-2000.
 XX
 PF 19-OCT-1999; 99MO-US024278.
 XX
 PR 19-OCT-1998; 98US-0104804P.
 XX
 PA (METH-) METHYLGENE INC.
 PI Besterman JM, Macleod AR, Siders WM;
 XX
 DR WPI; 2000-339532/29.
 XX
 PT Inhibiting gene expression e.g. DNA methyltransferase, by treating cells
 PT with a synergetic amount of antisense oligonucleotide and protein
 PT effector e.g. 5-aza-cytidine of gene products, useful for gene therapy
 PT of e.g. tumors.
 XX
 PS Disclosure; Page 29; 39pp; English.
 XX

The present invention describes a method for inhibiting the expression of
 a gene in a cell comprising contacting the cell with an effective
 synergetic amount of an antisense oligonucleotide which inhibits
 expression of the gene, and an effective synergetic amount of a protein
 effector of a product of the gene. Also described are: (1) a method for
 treating a disease responsive to inhibition of a gene in a mammal; (2) a
 method for inhibiting tumor growth in mammal; (3) an inhibitor of a gene
 comprising an antisense oligonucleotide which inhibits expression of the
 gene in operable association with a protein effector of a gene product;
 and (4) a pharmaceutical composition comprising the inhibitor of (3). The
 methods and compositions are useful as analytical tools for transgenic
 studies and as therapeutic tools, e.g. as gene therapy tools for human
 diseases including benign and malignant tumors, inflammation or asthma.
 The methods, inhibitors and compositions of the invention that inhibit
 expression or activity of a gene or gene product may be used to treat
 patients having, or predisposed to developing, a disease responsive to
 inhibition of the gene. These may also be used to activate silenced genes
 to provide missing gene functions and improve a given condition.
 Furthermore, the methods and compositions are useful as probes of the
 physiological function of a gene product in an experimental cell culture
 or animal system, and to evaluate the effect of inhibiting gene activity
 or expression. AAA55758 to AAA55842 represent oligonucleotide sequences
 which are used in the exemplification of the present invention

Sequence 20 BP; 0 A; 9 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2640 CCTGACAGCTGCTGCTGC 2656
 |||||
 Db 4 CCTGCTGCTGCTGCTGC 20

RESULT 736
 AAD00754
 ID AAD00754 standard; DNA; 20 BP.
 XX
 AC AAD00754;
 XX
 DT 08-SBP-2000 (first entry)
 XX
 DE Sense PCR primer #2, to amplify ADNF III cDNA from human neuroblastoma.
 XX
 KM Activity Dependent Neurotrophic Factor III; ADNF; mouse; PCR primer;
 KM ADNF; Activity Dependent Neuroprotective Protein; neuronal cell death;
 KM HIV; Human Immunodeficiency Virus; neurological deficiency; treatment;
 KM Alzheimer's disease; beta-amyloid peptide; Huntington's disease;
 KM epilepsy; AIDS dementia complex; neuropathic pain syndrome; ALS;
 KM amyotrophic lateral sclerosis; Parkinson's disease; leber's disease;
 KM mitochondrial abnormality; Wernicke's encephalopathy; homocysteinuria;
 KM hyperproliferative; sulphite oxide disease; Tourette's syndrome; nocturnal;
 KM Down's syndrome; drug addiction; developmental retardation; antileptic;
 KM learning impairment; anticonvulsant; neuroprotective; anti-HIV; ss.
 XX
 OS Mus sp.
 XX
 PN MO200027875-A2.
 XX
 PD 18-MAY-2000.
 XX
 PF 04-NOV-1999; 99MO-US026213.
 XX
 PR 06-NOV-1998; 98US-00187330.
 XX
 PA (USAS) GOVERNMENT US REPRESENT AS.
 PA (UYRA-) UNIV RAMOT APPLIED RES & IND DEV LTD.
 PI Gozes I, Breneman DE, Baasan M, Zamostiano R;
 XX
 DR WPI; 2000-376491/32.
 XX
 PT New nucleic acid encoding an activity dependent neurotrophic factor III
 PT (ADNF III) useful in the treatment of neurological deficiencies and for
 PT preventing neuronal cell death.
 XX
 PS Claim 10; Page 91; 136pp; English.
 XX

The present sequence is the sense PCR primer, that corresponds to 71-90
 bases of mouse Activity Dependent Neurotrophic Factor (ADNF) III cDNA,
 used for amplification of cDNA from human neuroblastoma. ADNF III is also
 called an Activity Dependent Neuroprotective Protein (ADNP) and is
 expressed in the astrocytes, brain and also in foetal lung and endocrine
 tissues. ADNF III has homology to ADNF I and hsp60, a heat shock protein
 and pPPL, a DNA repair protein. The ADNF III polypeptides are useful for
 the treatment of neurological deficiencies and for prevention of neuronal
 cell death associated with SP120, the envelope protein from HIV, N-methyl
 -D-aspartic acid (excito-toxicity); tetrodotoxin (blockage of electrical
 activity); and beta- amyloid peptide, a substance related to neuronal
 degeneration in Alzheimer's disease. It is useful for the treatment of
 Huntington's disease, AIDS dementia complex, epilepsy, neuropathic pain
 syndromes, Parkinson's disease, amyotrophic lateral sclerosis (ALS),
 mitochondrial abnormalities, leber's disease, Wernicke's encephalopathy,
 Alzheimer's disease, homocysteinuria, hyperproliferative, sulphite oxide
 disease, Tourette's syndrome, oxidative stress induced neuronal death,
 Down's syndrome, developmental retardation and learning impairments, drug

```

CC addition, tolerance and dependency
XX
SQ Sequence 20 BP; 9 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

Query Match      0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3305 ACCTGCGAGCAACAC 3321
        |||||
Db       1 ACCTGCGAGCAACAC 17

RESULT 737
AAA09924/c
ID AAA09924 standard; DNA; 20 BP.
XX
XX AAA09924;
XX
XX 05-JUL-2000 (first entry)
XX
XX Primer 1 for human immunoglobulin kappa variable region gene Vk1-2.
XX
XX Foreign chromosome; microcell fusion; homologous recombination; antibody;
XX targeting vector; transgenic animal; disease model; knockout animal;
XX PCR primer; human; ss.
XX
XX Homo sapiens.
XX
XX WO200010383-A1.
XX
XX 02-MAR-2000.
XX
XX 23-AUG-1999; 99WO-JP004518.
XX
XX 21-AUG-1998; 98JP-00236169.
XX
XX (KIR1 ) KIRIN BEER KK.
XX
XX Tomioka K, Yoshida H, Hanaoka K, Ohimura M, Ishida I;
XX Kuroiwa Y;
XX
XX WPI; 2000-246479/21.
XX
XX Producing a cell containing modified foreign chromosomes, useful for the
XX generation of transgenic animals.
XX
XX Example 1; Page 55; 316p; Japanese.
XX
XX The invention relates to a novel method of producing cells containing a
XX modified foreign chromosome or chromosome fragment. The method comprises:
XX (a) fusing a microcell comprising the foreign chromosome or chromosome
XX fragment, with a cell having a high efficiency for homologous
XX recombination; (b) marking the desired site of insertion of the foreign
XX chromosome using a targeting vector; and (c) inducing deletion or
XX translocation at the marked site. Transgenic animals produced by the
XX method are useful to provide disease models and knockout animals, and in
XX the production of human proteins, particularly human antibodies. This
XX sequence is used in the method of the invention
XX
XX Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

Query Match      0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      865 GCAGTGTATATGCGCTG 881
        |||||
Db       20 GCACTGTATATGCGCTG 4

RESULT 738
AAA030308/c

```

```

ID AAA030308 standard; DNA; 20 BP.
XX
XX AAA030308;
XX
XX 22-NOV-2000 (first entry)
XX
XX Human ASTH1J 5' region polymorphic site, SEQ ID NO:56.
XX
XX ASTH1 locus; ASTH1I; ASTH1J; human; chromosome 11p; asthma;
XX bronchial hyperreactivity; ets family; transcription factor;
XX splice variant; genetic predisposition; polymorphism; antibody;
XX drug screening; prophylaxis; therapy; diagnosis;
XX single nucleotide polymorphism; SNP; ss.
XX
XX Homo sapiens.
XX
XX US6087485-A.
XX
XX 11-JUL-2000.
XX
XX 21-JAN-1998; 98US-00009913.
XX
XX 21-JAN-1997; 97US-0035663P.
XX
XX 01-JUL-1997; 97US-0051432P.
XX
XX (AXYS-) AXYS PHARM INC.
XX
XX Galvin M, Miller A, North M, Cardon L, Buckler A;
XX Brooks-Wilson AR, Carey AH;
XX
XX WPI; 2000-505109/45.
XX
XX New nucleic acids other than naturally occurring chromosomes encoding
XX ASTH1 protein, for e.g. screening compositions that modulate expression
XX or function of ASTH1 proteins or as diagnostics for genetic
XX predisposition to asthma.
XX
XX Example; Col 41-42; 131p; English.
XX
XX The invention relates to the ASTH1 locus on the short arm of human
XX chromosome (11p). This locus comprises the ASTH1I and ASTH1J genes, which
XX are associated with a genetic predisposition to asthma and bronchial
XX hyperreactivity. The ASTH1I and ASTH1J genes are oriented in opposite
XX directions with the ASTH1 locus, and have similar patterns of expression
XX and common sequence motifs. They are both expressed in trachea, lung and
XX several other tissues. ASTH1I and ASTH1J are novel members of the ets
XX family of transcription factors, which have been implicated in the
XX activation of a variety of genes including the fcrα gene and cytokine
XX genes known to be important in the aetiology of asthma. Both ASTH1I and
XX ASTH1J mRNAs are alternatively spliced. Alternative splicing of
XX transcripts has no effect on the open reading frame of ASTH1J, as the
XX exons involved are all 5' to the start codon in exon b. In contrast,
XX alternative splicing of ASTH1I transcripts results in 3 different ASTH1I
XX isoforms. The invention also encompasses mouse asth1j protein. The ASTH1
XX nucleic acids are useful as diagnostics to identify a hereditary
XX predisposition to asthma, as probes for identifying ASTH1 related genes,
XX for identifying expression of the gene in a biological specimen, and for
XX generating genetically modified non-human animals or site specific gene
XX modifications in cell lines. The encoded ASTH1 proteins are useful as
XX immunogens to raise specific antibodies; in drug screening for
XX compositions that mimic or modulate activity or expression of ASTH1I
XX and/or ASTH1J (including altered forms of these proteins); and as a
XX therapeutic. The ASTH1 genes or fragments thereof, encoded proteins,
XX ASTH1 genomic regulatory regions, and anti-ASTH1I and anti-ASTH1J
XX antibodies are useful in the identification of individuals predisposed to
XX development of asthma, and for modulation of gene activity in vivo for
XX prophylactic and therapeutic purposes. The intact ASTH1I or ASTH1J
XX proteins or active fragments thereof may be used to modulate or reduce
XX bronchial hyperreactivity. Sequences AAA0260-A00261 and AAA0264-A00416
XX represent polymorphic sites within the ASTH1J or ASTH1I genes
XX
XX Sequence 20 BP; 6 A; 5 C; 5 G; 3 T; 0 U; 1 Other;

```

Query Match 0.3%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

OY 4891 ACAAGTTGCCATGTGCTT 4909
 |||||
 DB 19 ACAAGTTGCTGCTGCTT 1

RESULT 739

AAH43117
 ID AAH43117 standard; DNA; 20 BP.

XX
 AC AAH43117;

DT 19-SEP-2001 (first entry)

XX Antisense oligo, target HDAC-2 132-152.

XX Antisense; histone deacetylase; HDAC-1; HDAC-2; HDAC-4; inhibitor;

KM cell proliferation; cancer; restenosis; psoriasis; protozoal infection;

KM fungal infections; ss.

XX Synthetic.

XX MO200138322-A1.

XX 31-MAY-2001.

XX 22-NOV-2000; 2000MO-IB001881.

XX 23-NOV-1999; 99US-0167035P.

XX (METH-) METHYLGENE INC.

XX Delorme D, Ruel R, Lavoie R, Thibault C, Abou-Khalil E;

XX WPI; 2001-432601/46.

XX New inhibitors of histone deacetylase e.g. N-hydroxy-5-(4-

XX (benzenesulfonylamino)-phenyl)-4-yn-2-pentanamide for treating cancer,

XX restenosis or fungal infections.

XX Disclosure; Page 40; 147pp; English.

XX The sequences given in AAH43115-21 are oligonucleotides which are

XX antisense to the histone deacetylase gene, HDAC-2. These oligonucleotides

XX may be used in combination with an inhibitor of histone deacetylase

XX enzyme function, to given an improved inhibitory effect, thereby reducing

XX the amount of inhibitor required to obtain a given inhibitory effect.

XX Compounds containing these oligonucleotides may be used to treat cell

XX proliferation conditions such as cancer, restenosis or psoriasis. They

XX can also be used to treat protozoal and fungal infections

RESULT 740

AAFS4889
 ID AAFS4889 standard; DNA; 20 BP.

XX
 AC AAFS4889;

XX 15-MAY-2001 (first entry)

DE PCR primer for activity dependent neurotrophic factor (ADNF) III cDNA.

XX Activity dependent neurotrophic factor III; ADNF III; cancer; psoriasis;

KM neuronal cell death; foetal alcohol syndrome; proliferating cell;

KM restenotic plaque; atherosclerosis; restenosis; retinal hemangioblastoma;

KM benign prostatic hyperplasia cell; PCR primer; ss.

XX Nus gp.

XX MO200109311-A2.

XX 08-FEB-2001.

XX 28-JUL-2000; 2000MO-US020742.

XX 30-JUL-1999; 99US-00364609.

XX (UYRA-) UNIV RAMOT APPLIED RES & IND DEV LTD.

XX (USSH) US DEPT HEALTH & HUMAN SERVICES.

XX Gozes I, Breneman DE, Zamostiano R, Gelber E, Pinhasov A;

XX Bassan M;

XX WPI; 2001-159867/16.

XX Inhibiting the growth of malignant or benign proliferating cells (e.g.

XX breast cancer or psoriatic cells, respectively), by contacting the cells

XX with an activity dependent neurotrophic factor III antisense

XX oligonucleotide.

XX Example 1; Page 29; 57pp; English.

XX PCR primers AAFS4889-90 were used to amplify human activity dependent

XX neurotrophic factor (ADNF) III cDNA. The primers are based on murine ADNF

XX III. ADNF III is involved in prevention of neuronal cell death, and

XX foetal alcohol syndrome. The specification describes a method for

XX inhibiting the growth of a pathologically proliferating cell. The method

XX comprises contacting the cell with an ADNF III antisense oligonucleotide.

XX The method is useful for inhibiting and detecting the growth of

XX pathologically proliferating or malignant cells, e.g. breast cancer,

XX neuroblastoma, ovarian cancer, endometrial cancer, prostate cancer,

XX bladder cancer, lung cancer, oesophageal cancer, neuroendocrine cancer,

XX brain cancer, colon cancer, testicular cancer, pancreatic cancer or

XX leukaemia. The method may also be used to inhibit and/or detect the

XX growth of benign proliferating cells, e.g. restenotic plaques in vascular

XX smooth muscle (e.g. atherosclerosis or restenosis), benign prostatic

XX hyperplasia cells, retinal hemangioblastomas or psoriatic cells. The

XX method may be used to inhibit the growth of cancer cells ex vivo or in

XX vivo

SO Sequence 20 BP; 9 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 20;

Best Local Similarity 94.1%; Pred. No. 8.7e+02;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 3305 ACCTGACGAGAAACAC 3321
 |||||
 DB 1 ACCTGACGAGAAACAC 17

RESULT 741

AAC89537
 ID AAC89537 standard; DNA; 20 BP.

XX
 AC AAC89537;

XX 08-MAR-2001 (first entry)

XX Human HDAC-2 PCR primer SEQ ID NO: 7.

XX Histone deacetylase; HDAC-1; HDAC-2; HDAC-3; HDAC-4; HDAC-5; HDAC-C;

KM HDAC-D; cell cycle; tumorigenesis; cancer; inhibitor; antisense;

KW gene therapy; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200071703-A2.
XX
PD 30-NOV-2000.
XX
PF 03-MAY-2000; 2000WO-IB001252.
XX
PR 03-MAY-1999; 99US-0132287P.
XX
PA (METH-) METHYLGENE INC.
XX
PI Macleod AR, Li Z, Besterman JW;
XX
DR WPI; 2001-016407/02.
XX
PT Antisense oligonucleotide that inhibits expression of a histone
XX deacetylase, useful for treating and/or alleviating the symptoms of
XX neoplasia, or for inhibiting neoplastic cell growth in an animal.
XX
PS Disclosure; Page 12; 125pp; English.
XX
CC The present invention provides inhibitors of histone deacetylase enzymes
XX such as HDAC-1, HDAC-2, HDAC-3, HDAC-4, HDAC-5, HDAC-C and HDAC-D. These
XX inhibitors may be antisense strands or they may be compounds identified
XX by contacting the enzyme with the compound and measuring the resulting
XX enzyme activity. These inhibitors are useful for treating cancers and for
XX identifying which histone deacetylase is involved in a neoplasia
XX
SQ Sequence 20 BP; 0 A; 9 C; 5 G; 6 T; 0 U; 0 Other;
XX
QY Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
DB 2640 CCTGCAGCTGCTGCTGC 2656
4 CCTGCTGCTGCTGCTGC 20
XX
RESULT 742
AAC89546
ID AAC89546 standard; DNA; 20 BP.
XX
AC AAC89546;
XX
DT 08-MAR-2001 (first entry)
XX
DE Human HDAC-2 antisense sequence SEQ ID NO: 16.
XX
XX Histone deacetylase; HDAC-1; HDAC-2; HDAC-3; HDAC-4; HDAC-5; HDAC-C;
XX HDAC-D; cell cycle; tumorigenesis; cancer; inhibitor; antisense;
XX gene therapy; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200071703-A2.
XX
PD 30-NOV-2000.
XX
PF 03-MAY-2000; 2000WO-IB001252.
XX
PR 03-MAY-1999; 99US-0132287P.
XX
PA (METH-) METHYLGENE INC.
XX
PI Macleod AR, Li Z, Besterman JW;
XX
DR WPI; 2001-016407/02.
XX
PT Antisense oligonucleotide that inhibits expression of a histone

PT deacetylase, useful for treating and/or alleviating the symptoms of
XX neoplasia, or for inhibiting neoplastic cell growth in an animal.
XX
PS Example 1; Page 24; 125pp; English.
XX
CC The present invention provides inhibitors of histone deacetylase enzymes
XX such as HDAC-1, HDAC-2, HDAC-3, HDAC-4, HDAC-5, HDAC-C and HDAC-D. These
XX inhibitors may be antisense strands or they may be compounds identified
XX by contacting the enzyme with the compound and measuring the resulting
XX enzyme activity. These inhibitors are useful for treating cancers and for
XX identifying which histone deacetylase is involved in a neoplasia
XX
SQ Sequence 20 BP; 0 A; 9 C; 5 G; 4 T; 2 U; 0 Other;
XX
QY Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 8.7e+02;
Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
DB 2640 CCTGCAGCTGCTGCTGC 2656
4 CCTGCTGCTGCTGCTGC 20
XX
RESULT 743
AAF83959/C
ID AAF83959 standard; DNA; 20 BP.
XX
AC AAF83959;
XX
DT 06-AUG-2001 (first entry)
XX
DE BAP28 gene fragment amplifying primer BAP28polyTCoutt.
XX
XX BAP28; prostate; tumour; cancer; diagnostic; genetic analysis; PCTA-1;
XX PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200100669-A2.
XX
PD 04-JAN-2001.
XX
PF 23-JUN-2000; 2000WO-IB001183.
XX
PR 25-JUN-1999; 99US-014323P.
XX
PR 18-JAN-2000; 2000US-0176880P.
XX
PA (GEST) GENSRT.
XX
PI Barry C, Bougueleret L, Chumakov I, Cohen-Avenine A;
XX
DR WPI; 2001-367032/38.
XX
PT New BAP28 polynucleotides and polypeptides overexpressed in prostate
XX cancer cells for diagnosing prostate tumors, e.g. by hybridization or
XX polymerase chain reaction assays.
XX
PS Example; Page 347; 349pp; English.
XX
CC The invention is directed to BAP28 polypeptides, BAP28 polynucleotide
XX sequences and regulatory region located at the 3' and 5' ends of the
XX BAP28 coding region. The BAP28 polypeptides can be expressed by standard
XX recombinant methodology. BAP28 polynucleotides and polypeptides have been
XX found to be over expressed in prostate tumour cells, therefore levels of
XX BAP28 expression and/or activity may be assayed (e.g. by polymerase chain
XX reaction (PCR)) to diagnose patient suffering from or susceptible to
XX prostate cancer. Antibodies specific for the BAP28 polypeptides are
XX useful as diagnostic reagents. Biallelic markers of the BAP28 gene are
XX useful in genetic analysis. Sequences AAF83934-963 represent primers for
XX the BAP28 gene and PCTA-1 gene (the coding strand of PCTA-1 gene is on
XX the opposite of the coding strand of BAP28)
XX
SQ Sequence 20 BP; 2 A; 0 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5399 ATACAAAAAGAAAAA 5415
 |||||
 DB 19 ATACAAAAA 3

RESULT 744
 AAD12482/c
 ID AAD12482 standard; DNA; 20 BP.
 XX
 AC AAD12482;
 XX
 XX 25-SEP-2001 (first entry)
 XX
 XX Mouse caspase 8 mRNA antisense compound ISIS 107760.
 DE
 XX
 XX Caspase 8; infection; inflammation; tumour; research reagent; cytostatic;
 KM gene therapy; antisense; mouse; phosphorothioate; ss.
 XX
 XX Mus musculus.
 OS Synthetic.
 OS
 XX
 PH Key
 FT modified_base 1.20
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone"
 FT 1.5
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
 FT 1
 FT /tag= d
 FT /mod_base= m5c
 FT 2
 FT /tag= e
 FT /mod_base= m5c
 FT 3
 FT /tag= f
 FT /mod_base= m5c
 FT 5
 FT /tag= g
 FT /mod_base= m5c
 FT 9
 FT /tag= h
 FT /mod_base= m5c
 FT 11
 FT /tag= i
 FT /mod_base= m5c
 FT 15
 FT /tag= j
 FT /mod_base= m5c
 FT 16.20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
 FT
 PN US6258600-B1.
 XX
 XX 10-JUL-2001.
 PD
 XX 19-JAN-2000; 2000US-00487445.
 XX
 XX 19-JAN-2000; 2000US-00487445.
 PR (ISIS-) ISIS PHARM INC.
 XX
 XX Zhang H, Cowbert LM;
 PI
 XX

DR WPI; 2001-432165/46.
 XX
 XX New antisense compounds capable of modulating expression of caspase 8 for
 PT the diagnoses, prophylaxis and treatment of diseases associated with
 PT expression of caspase 8, e.g. inflammation and tumor formation.
 XX
 PS Claim 1; Col 47-48; 56pp; English.
 XX
 CC The invention relates to antisense compounds which inhibit the expression
 CC of human caspase 8. The antisense compound is useful for diagnosing and
 CC treating diseases associated with the expression of caspase 8 and for
 CC prophylaxis e.g. to prevent or delay infection, inflammation or tumour
 CC formation, and as a research reagent. The present sequence is an
 CC antisense compound targeted to mouse caspase 8 mRNA
 CC
 SQ Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3175 CTTTGCCAGAGACTGAG 3191
 |||||
 DB 19 CTTTGCCAGAGCCTGAG 3

RESULT 745
 ABQ93238
 ID ABQ93238 standard; DNA; 20 BP.
 XX
 AC ABQ93238;
 XX
 DT 29-AUG-2003 (revised)
 DT 21-OCT-2002 (first entry)
 XX
 XX T. tauschii/wheat D genome microsatellite cfa2043 right PCR primer.
 DE
 XX
 XX Microsatellite marker; wheat; D genome; mapping; genotyping;
 KM polymorphism; phenotypic trait; QTL; quantitative trait locus;
 KM disease-associated gene; development factor; quality factor;
 KM resistance factor; wheat product; identification; detection;
 KM genetically modified wheat; PCR; primer; ss.
 XX
 XX Aegilops tauschii.
 OS Triticum aestivum.
 OS
 PN EP1217079-A1.
 XX
 XX 26-JUN-2002.
 PD
 XX 22-DEC-2000; 2000EP-00403659.
 PF
 XX 22-DEC-2000; 2000EP-00403659.
 PR
 XX (INRA) INRA INST NAT RECH AGRONOMIQUE.
 PA
 XX Bernard M, Sourdilille P, Guyomarch H;
 PI
 XX
 XX WPI; 2002-550410/59.
 DR
 XX
 XX Map of wheat D genome comprising the genome location of a microsatellite
 PT marker, useful for e.g. identifying genes responsible for a desired
 PT phenotypic trait, especially quantitative trait loci in wheat, and
 PT diseases.
 XX
 PS Claim 4; Page 8; 105pp; English.
 XX
 CC The invention relates to a map of the bread wheat D genome comprising the
 CC genome location of a microsatellite marker selected from a group of 185
 CC such markers (ABQ92733-ABQ92917). The invention also encompasses the use
 CC of left (ABQ92918-ABQ93102) and right (ABQ93103-ABQ93287) primers to
 CC amplify and detect the microsatellite markers, and to identify genes
 CC responsible for a phenotypic trait of interest in wheat. Wheat is an

CC allohexaploid species consisting of 3 diploid genomes designated A, B and
 CC D, resulting from two successive intercrossings involving at least three
 CC different species. The D genome is thought to have been introduced in the
 CC most recent intercrossing, between the amphiploid AABB and Triticum
 CC tauschii (TD), probably involving only a limited number of genotypes of
 CC both species. Due to its polyploid genome, the large size of its genome,
 CC and its low level of polymorphism, the genetic mapping of wheat has to
 CC date been difficult. Microsatellites are tandemly repeated sequences
 CC between one and six nucleotides long, and are very polymorphic in length,
 CC mainly due to polymerase slippage during replication. This high degree of
 CC polymorphism makes them especially suitable for the genetic mapping of
 CC species which show little intraspecies polymorphism, such as wheat. In
 CC addition, microsatellites are codominant, and exhibit Mendelian
 CC inheritance. The 185 microsatellite markers of the invention are
 CC developed from the ancestral diploid donor species Triticum tauschii and
 CC map to the wheat D genome, which is less polymorphic than the A or B
 CC genomes. These microsatellite markers thus help to overcome some of the
 CC problems associated with the genetic mapping of wheat. The wheat D genome
 CC map and the microsatellite markers and associated primers of the
 CC invention are useful for identifying genes responsible for a phenotypic
 CC trait of interest, most notably QTLs (quantitative trait loci). In
 CC particular they may be used for analysing genes and alleles implicated in
 CC disease and for identifying development factors, quality factors and
 CC factors conferring resistance to pathogens and xenobiotics. The
 CC microsatellite markers, and associated primers may be also be used in
 CC mapping and genotyping diploid and polyploid species of Triticum,
 CC particularly Agriopsis, Triticum monococcum, Triticum durum, Triticum
 CC aestivum, or related species; for identifying cultivars and hybrids of
 CC Triticum and related species; to assess whether or not a product
 CC comprises wheat or a related species; and to assess whether or not a
 CC product comprises genetically modified wheat. The present sequence
 CC represents a specifically claimed Triticum tauschii/wheat genome D
 CC microsatellite marker right PCR primer of the invention. (Updated on 29-
 CC AUG-2003 to standardise OS field)
 XX
 SQ Sequence 20 BP; 6 A; 2 C; 10 G; 2 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3423 GAGGCGAGCACTGAGG 3439
 Db 1 GAGGCGAGCACTGAGG 17
 RESULT 746
 AAD34340
 ID AAD34340 standard; DNA; 20 BP.
 XX
 AC AAD34340;
 XX
 DT 16-JUL-2002 (first entry)
 XX
 DE Human BSMR gene polymorphism detecting PCR primer, LRGEN9R.
 XX
 KW Human; bone strength and mineralisation regulatory protein; BSMR;
 KW bone strength; mineralisation; ophthalmological; antidiabetic;
 KW bone density regulating transmembrane receptor; prosthetic device;
 KW surgical implant; diabetic retinopathy; hypertensive retinopathy;
 KW therapy; osteoporosis; prematurity; ocular vessel; eye disorder;
 KW osteopathic; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200216553-A2.
 XX
 PD 28-FEB-2002.
 XX
 PF 17-AUG-2001; 2001WO-US041788.
 XX
 PR 18-AUG-2000; 2000US-0226119P.
 PR 22-SEP-2000; 2000US-0234337P.

PR 13-JUL-2001; 2001US-0304851P.
 XX
 PA (AVENT) AVENTIS PHARMA SA.
 PA (HARD) HARVARD COLLEGE.
 PA (UYCA-) UNIV CASE WESTERN RESERVE.
 XX
 PI Warman ML, Gong Y, Olsen BR, Rawadi G, Roman-Roman S;
 XX
 DR WPI; 2002-329694/36.
 XX
 PT Polynucleotide encoding bone strength and mineralization regulatory
 PT protein useful for diagnosis or therapy of osteoporosis.
 XX
 PS Disclosure; Fig 5; 124pp; English.
 XX
 PS The invention relates to bone strength and mineralisation regulatory
 CC protein (BSMR) and its corresponding nucleic acid sequence. BSMR DNA is
 CC useful for the diagnosis or therapy of osteoporosis and for regulating
 CC (increasing) bone strength and mineralisation in a human subject by
 CC activating a bone density regulating transmembrane receptor (BSMR
 CC protein). An expression vector comprising a promoter that is operably
 CC linked to BSMR DNA is useful for modulating bone density and for
 CC enhancing bone strength and mineralisation in a mammal cell. Composition
 CC comprising a BSMR effector is useful for treating osteoporosis and is
 CC useful particularly as a coating for prosthetic devices and surgical
 CC implants. BSMR is useful for screening lead pharmaceutical agents as BSMR
 CC effectors, which may be used to treat a range of eye disorders such as
 CC diabetic retinopathy, hypertensive retinopathy and retinopathy of
 CC prematurity, in which normal vascular growth and integrity of ocular
 CC vessels is disrupted. The present sequence is a PCR primer used to
 CC amplify cDNA and gDNA molecules useful for detecting polymorphic BSMR
 CC genes in human
 XX
 SQ Sequence 20 BP; 6 A; 3 C; 8 G; 3 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3422 TGAGCGAGCACTGAGG 3438
 Db 4 TGAGCGAGCACTGAGG 20
 RESULT 747
 ABX64386/c
 ID ABX64386 standard; DNA; 20 BP.
 XX
 AC ABX64386;
 XX
 DT 07-AUG-2003 (revised)
 DT 28-FEB-2003 (first entry)
 XX
 DE Retroviral packaging plasmid construction PCR primer, #41.
 XX
 KW PCR; primer; ss; retroviral packaging plasmid; retrovirus; gene delivery;
 KW gene therapy; replication-incompetent; replication-competent;
 KW helper virus; LTR; long terminal repeat; virus; psi; xenotropic;
 KW amphotropic; ecotropic; polytropic; envelope protein; haematopoietic;
 KW stem cell; lymphocyte.
 XX
 OS Gibbon Ape Leukemia Virus.
 XX
 OS Synthetic.
 XX
 PN US2002106799-A1.
 XX
 PD 08-AUG-2002.
 XX
 PF 04-SEP-2001; 2001US-00944411.
 XX
 PR 11-JUN-1993; 93US-00076299.
 PR 10-JUN-1994; 94US-00258152.
 PR 20-AUG-1997; 97US-00914893.

XX (FINE/) FINER M H.
PA (DUL/) DUL T J.
PA (ZSEB/) ZSEBO K M.
PA (COOK/) COOKE K.
PA (PARS/) PARSON D A.
XX
PI Finer MH, Dull TJ, Zsebo KM, Cooke K, Parson DA;
XX WPI, 2002-722693/78.
XX
XX Novel retroviral packaging system useful for producing high-titers of
PT recombinant retrovirus in human cells, comprises at least one retroviral
PT helper DNA sequence derived from replication-incompetent retroviral
PT genome.
XX
XX Example 14, Page 27, 53pp; English.
XX
XX The invention discloses a retroviral packaging plasmid for producing
CC recombinant retrovirus in human cells. Retrovirus vectors have become the
CC primary tool for gene delivery in human gene therapy applications. The
CC plasmid has a retroviral helper DNA sequence, derived from a replication-
CC incompetent retroviral genome, encoding, in trans, all virion proteins
CC required for packaging a replication-incompetent retroviral vector and
CC for producing virion proteins capable of packaging the replication-
CC incompetent retroviral vector at high titer, without production of a
CC replication-competent helper virus. The retroviral DNA sequence lacks the
CC region encoding the native enhancer and/or promoter of the viral 5' LTR
CC (long terminal repeat) of the virus and lacks both the psi function
CC sequence responsible for packaging helper genome and the 3' LTR, but
CC encodes a foreign enhancer and/or promoter functional in a selected
CC mammalian cell, and a foreign polyadenylation site, from a xenotropic,
CC amphotropic, ecotropic or polytropic envelope protein. The retroviral
CC packaging plasmid is useful for a high efficiency method to transduce
CC mammalian hematopoietic stem cells, or mammalian T and B lymphocytes,
CC for producing human stable retroviral producer cells, for the rapid
CC production of high titer viral supernatants and to transduce with high
CC efficiency cells that are refractory to transduction by conventional
CC methods. The sequences presented in ABX64336-ABX64335 and ABX64375-
CC ABX64392 are the PCR primers used in the construction of the retroviral
CC packaging plasmids. (Updated on 07-AUG-2003 to correct OS field.)
XX
SQ Sequence 20 BP; 2 A; 2 C; 11 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 4821 CACGAGCCTTGACCTT 4837
DB 19 CACGAGCCTTGACCTT 3
XX
RESULT 748
ACCA5221/c
ID ACC45221 standard; DNA; 20 BP.
XX
AC ACC45221;
XX
DT 16-JUN-2003 (first entry)
XX
DE Human NAC chimeric phosphorothioate oligonucleotide SEQ ID NO:81.
XX
XX Human; cytostatic; neurotropic; neuroprotective; antiinflammatory;
KM antisense therapy; NAC; DBPCAP; hyperproliferative disease; apoptosis;
KM death effector filament-forming CED4-like apoptosis protein;
KM neurological disease; infection; inflammation; tumour formation;
KM phosphorothioate; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers

FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
FT modified_base 15..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
XX
XX WO2003024988-A1.
XX
XX 27-MAR-2003.
XX
XX 19-SEP-2002; 2002WO-US029664.
XX
XX 19-SEP-2001; 2001US-00956712.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Benmett CF, Freiler SM;
XX
XX WPI, 2003-354583/33.
XX
XX New antisense compounds, useful for modulating the expression of NAC or
PT for treating a disease or condition associated with the expression of
PT NAC, e.g. hyperproliferative disease or neurological disease.
XX
XX Example 15; Page 76; 147pp; English.
XX
XX The present invention describes a compound (1) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule encoding NAC, where the compound
CC specifically hybridizes with the nucleic acid molecule encoding NAC and
CC inhibits the expression of NAC. The compound specifically hybridizes with
CC at least an 8-nucleobase portion of an active site on a nucleic acid
CC molecule encoding NAC. Also described: (1) a composition comprising (1)
CC and a pharmaceutical carrier or diluent; (2) inhibiting the expression of
CC NAC in cells or tissues comprising contacting the cells or tissues with
CC (1); and (3) treating an animal having a disease or condition associated
CC with NAC comprising administering (1) to the animal so that expression of
CC NAC is inhibited. (1) has cytostatic, neurotropic, neuroprotective and
CC antiinflammatory activities, and can be used in antisense therapy. The
CC antisense compounds (1) are useful for modulating the expression of NAC,
CC and for treating a disease or condition associated with expression of
CC NAC, e.g. hyperproliferative disease, neurological disease, or a disease
CC or disorder arising from aberrant apoptosis. The compounds are also
CC useful as research reagents and kits, or for diagnostics, therapeutics
CC and prophylaxis, e.g. to prevent or delay infection, inflammation or
CC tumour formation. NAC is also known as a death effector filament-forming
CC CED4-like apoptosis protein (DEFCAP). NAC is located on human chromosome
CC 17p13. The present sequence represents a human NAC chimeric
CC phosphorothioate antisense oligonucleotide, which is given in the
CC exemplification of the present invention
XX
SQ Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 4303 AACGAAGTGAAGCTTGG 4319
DB 17 AACGAAGTGAAGCTTGG 1
XX
RESULT 749
ABT43248
ID ABT43248 standard; DNA; 20 BP.
XX
XX ABT43248;

```
XX 22-SEP-2003 (first entry)
XX Neuroblastoma-related DNA sequence #163.
DE Neuroblastoma; prognosis; ds; oligonucleotide.
XX Unidentified.
XX WO2002103017-A1.
XX 27-DEC-2002.
XX 30-MAY-2002; 2002WO-JP005295.
XX 31-MAY-2001; 2001JP-00163666.
XX 24-AUG-2001; 2001JP-00255260.
XX (CHIB-) CHIBA PREFECTURE.
XX (HISM-) HISAMITSU PHARM CO LTD.
XX Nakagawara A;
XX WPI; 2003-167523/16.
XX Nucleic acids isolated from neuroblastoma showing enhanced expression in
XX human neuroblastoma with good prognosis, useful in clarifying good/poor
XX prognosis of neuroblastoma and providing genetic data.
XX Example 5; Page 24; 444pp; Japanese.
XX The invention comprises DNA sequences that show enhanced expression in
XX human neuroblastoma with good prognosis. The DNA sequences of the
XX invention are useful in clarifying good/poor prognosis of neuroblastoma.
XX The present DNA sequence was used in the exemplification of the invention
XX Sequence 20 BP; 8 A; 6 C; 4 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1030 AGCCAGAGTCAACCCAA 1046
Db 3 ATCCAGAGTCAACCCAA 19
RESULT 750
ABT32419
ID ABT32419 standard; DNA; 20 BP.
XX
AC ABT32419;
XX
DT 08-MAY-2003 (first entry)
XX
DE Neuroblastoma-related oligonucleotide #196.
XX Neuroblastoma; prognosis; spontaneous regression; primer; probe; ds;
XX high malignancy.
XX Unidentified.
XX WO200297093-A1.
XX
PD 05-DEC-2002.
XX
XX 30-MAY-2002; 2002WO-JP005294.
XX
XX 30-MAY-2001; 2001JP-00162775.
XX
XX 24-AUG-2001; 2001JP-00255266.
XX
XX (CHIB-) CHIBA PREFECTURE.
XX (HISM-) HISAMITSU PHARM CO LTD.
PA
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XX Nakagawara A;
XX WPI; 2003-140476/13.
XX Nucleic acids having higher expression in human neuroblastoma with poor
XX prognosis for diagnostic prediction of neuroblastoma prognosis.
XX Example 5; Page 27; 111pp; Japanese.
XX The invention comprises nucleic acids that show increased expression in
XX human neuroblastomas with poor prognosis over those with a good
XX prognosis. The nucleic acids of the invention are useful as a tool for
XX distinguishing neuroblastomas with a favorable prognosis (spontaneous
XX regression) from neuroblastomas with a poor prognosis (high malignancy).
XX The DNA sequences ABT32224 - ABT32571 represent oligonucleotides used in
XX an example of the invention
XX Sequence 20 BP; 8 A; 6 C; 4 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1030 AGCCAGAGTCAACCCAA 1046
Db 3 ATCCAGAGTCAACCCAA 19
RESULT 751
AAL61851/C
ID AAL61851 standard; DNA; 20 BP.
XX
AC AAL61851;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human ETRB-LP-2 antisense oligonucleotide ISIS #204277.
XX
XX Human; G protein-coupled receptor; hyperproliferative disorder; GPR37LA;
XX endothelin type b receptor-like protein-2; cerebral vascular disease;
XX antisense; endothelin-binding receptor-like protein-2; atherosclerosis;
XX cardiovascular disease; ETRB-LP-2; G-protein coupled receptor 37 like 1;
XX acute proliferative nephropathy; ETRB-like protein 2; cancer; stroke;
XX angiogenesis; hypertension; phosphorothioate; ss.
XX Homo sapiens.
XX Synthetic.
XX
FH Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note="Phosphorothioate backbone; All cytidine residues
FT are 5-methylcytidines"
FT 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note="2'-methoxyethyl (2'-MOE) nucleotides"
FT 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note="2'-methoxyethyl (2'-MOE) nucleotides"
XX
XX WO2003050244-A2.
XX
XX 19-JUN-2003.
XX
XX 04-DEC-2002; 2002WO-US038520.
XX
XX 06-DEC-2001; 2001US-00003126.
XX
XX (ISIS-) ISIS PHARM INC.
PA
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XX Monia BP, Freier SM;
 XX WPI, 2003-558997/52.
 DR
 PT New oligonucleotides which bind the nucleic acid encoding the G protein
 PT coupled receptor ETRB-LP-2 (endothelin type b receptor-like protein-2
 PT receptor), useful for treating e.g. cancer and cardiovascular diseases.
 XX
 PS Example 15; Page 80; 106pp; English.
 XX
 CC The invention relates to antisense compounds targeted to the nucleic
 CC acid encoding the G protein-coupled receptor ETRB-LP-2 (endothelin type b
 CC receptor-like protein-2) to inhibit its expression. ETRB-LP-2 is also
 CC known as endothelin-binding receptor-like protein-2, ETRB-LP-2 protein 2
 CC and G-protein coupled receptor 37 like 1 (GPR37L1). Antisense compounds
 CC of the invention are useful for treating hyperproliferative disorders
 CC (especially cancer) and cardiovascular diseases especially angiogenesis,
 CC atherosclerosis, hypertension, cerebral vascular disease, stroke and
 CC acute proliferative nephropathy. The present sequence is an antisense
 CC oligonucleotide targeted to human ETRB-LP-2 DNA
 CC
 SQ Sequence 20 BP; 7 A; 3 C; 7 G; 3 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2324 TCTCACCTTCTTGAG 2340
 DB 19 TCTCACCTTCTTGAG 3
 RESULT 752
 ADC56830
 ID ADC56830 standard; DNA; 20 BP.
 XX
 AC ADC56830;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Mouse chaperonin PCR primer 2.
 XX
 XX Mouse; oestrogen; hippocampus; gene expression; calmodulin I; chimerin;
 KM neuromedin; T-rec-alpha rel.; 3B-HSD related protein; ATP-binding cases.;
 KM chaperonin; HCNP; histone-like protein; ZW10; vitronectin; gene; ds.
 XX
 OS Mus sp.
 XX
 PN JP2003139771-A.
 PD 14-MAY-2003.
 XX
 PF 02-NOV-2001; 2001JP-00338515.
 XX
 PR 02-NOV-2001; 2001JP-00338515.
 XX
 PA (EISA) EISAI CO LTD.
 XX
 DR WPI; 2003-818084/77.
 XX
 PT Screening for estrogen analog, by administering test compound to rodents,
 PT isolating hippocampus, monitoring for the expression of a particular gene
 PT in hippocampus, and selecting compound that alters gene expression.
 XX
 PS Disclosure; Fig 2; 16pp; Japanese.
 XX
 CC The invention relates to screening for an estrogen analogue, comprising
 CC administering a test compound to rodents, isolating hippocampus from
 CC rodents, monitoring for the expression level of a gene comprising mouse
 CC calmodulin I, chimerin, neuromedin, T-rec-alpha rel., 3B-HSD related
 CC protein, ATP-binding cases., chaperonin, HCNP, histone-like protein,
 CC unknown, ZW10, vitronectin or unknown encoding genes (SEQ ID NO 1-13) in

CC the hippocampus and selecting a compound that alters the gene expression
 CC as estrogen analogue. The method is useful for screening for estrogen
 CC analogues. The identified compound is useful for studying the effect of
 CC estrogen on the brain. The present sequence is that of a PCR primer used
 CC to measure mouse gene expressed in the hippocampus and disclosed in the
 CC invention.
 XX
 SQ Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1552 GCCAGCAGGTGAAGA 1568
 DB 4 GCCAGCAGGTGAAGA 20
 RESULT 753
 ADD25111/c
 ID ADD25111 standard; DNA; 20 BP.
 XX
 AC ADD25111;
 XX
 DT 15-JAN-2004 (first entry)
 XX
 DE Mouse caspase-8 antisense oligonucleotide ISIS 107760.
 XX
 XX Caspase-8; cytosolic; immunosuppressant; anti-HIV; B9;
 KM antisense gene therapy; apoptosis; hyperproliferative disorder;
 KM haematopoietic disorder; autoimmune disorder; viral infection; AIDS;
 KM neurological disorder; Alzheimer's disease; Parkinson's disease;
 KM amyotrophic lateral sclerosis; retinitis pigmentosa; blood cell disorder;
 KM cancer; mouse.
 XX
 OS Mus musculus.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone and all cytidines are 5
 FT -methylcytidines"
 FT modified_base 1..5
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl residues"
 FT modified_base 16..20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl residues"
 XX
 PN US2003083296-A1.
 PD 01-MAY-2003.
 XX
 PF 12-JUL-2002; 2002US-00181177.
 XX
 PR 19-JAN-2000; 2000US-00487445.
 PR 11-JAN-2001; 2001WO-US000955.
 XX
 PA (ZHAN) ZHANG H.
 PA (COMS) CONSERT L M.
 XX
 PI Zhang H, Cowsett LM;
 XX
 DR WPI; 2003-810793/76.
 XX
 PT New compounds, particularly antisense oligonucleotides targeted to a
 PT nucleic acid encoding caspase 8, useful for treating a disease/condition
 PT associated with caspase 8, such as hyperproliferative or autoimmune
 PT disorders.
 XX

PS Claim 3; SEQ ID NO 168; 59pp; English.

XX The invention relates to a compound 8-30 nucleobases in length targeted

CC to, and which specifically hybridizes with a nucleic acid molecule

CC encoding caspase 8 (a protein involved in apoptosis), and inhibits the

CC expression of caspase 8, i.e. an antisense oligonucleotide. Also included

CC are a compound 8-30 nucleobases in length that specifically hybridizes

CC with at least an 8-nucleobase portion of an active site on a nucleic acid

CC molecule encoding caspase 8, a composition comprising the compound and a

CC carrier or diluent, inhibiting the expression of caspase 8 in cells or

CC tissues (by contacting the cells or tissues with the compound so that

CC expression of caspase 8 is inhibited) and treating an animal having a

CC disease or condition associated with caspase 8 by administering to the

CC animal a therapeutic or prophylactic amount of the compound so that

CC expression of caspase 8 is inhibited. The compound, composition and

CC methods are useful for treating a disease or condition associated with

CC caspase 8, such as hyperproliferative, haematopoietic or autoimmune

CC disorder, viral infection such as AIDS, neurological disorders (e.g.

CC Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis,

CC retinitis pigmentosa), blood cell disorders and cancer. They are also

CC useful in research and diagnostics for modulating the expression of

CC interleukin 8. The present sequence is a caspase-8 targeting antisense

CC oligonucleotide of the invention.

XX

SQ Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 20;

Best Local Similarity 94.1%; Pred. No. 8.7e+02;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3175 CTTTGCCAGAGACTGAG 3191

DB 19 CTTTGCCAGAGCCTGAG 3

RESULT 754

ADFS3154/c

ID ADFS3154 standard; DNA; 20 BP.

XX

AC ADFS3154;

XX

DT 12-FEB-2004 (first entry)

XX

DE Variant detecting primer extension wild-type product oligo, SEQ ID 110.

XX

KM Variant detection; primer extension assay; mutation; cancer;

KW heterogeneous; sporadic mutation; genotyping; pooled sample; ss.

XX

OS Unidentified.

XX

PN WO2003071252-A2.

XX

PD 28-AUG-2003.

XX

PF 18-FEB-2003; 2003WO-US004827.

XX

PR 15-FEB-2002; 2002US-0357585P.

XX

PA (EXAC-) EXACT SCI CORP.

XX

PI Shuber AP, Kann L, Whitney D;

XX

DR WPI; 2003-697649/66.

XX

PT Detecting a variant in a primer extension assay, useful for analyzing

PT molecular events for identifying mutations indicative of cancer, by

PT contacting a target nucleic acid primer complementary to a region of the

PT target nucleic acid.

XX

PS Example 7; SEQ ID NO 110; 54pp; English.

XX The invention relates to a novel method for detecting a variant in a

CC primer extension assay, useful for analysing molecular events for

CC identifying mutations indicative of cancer, by contacting a target

CC nucleic acid primer complementary to a region of the target nucleic acid.

CC Detecting a variant in a primer extension assay comprises contacting a

CC target nucleic acid primer complementary to a region of the target

CC nucleic acid, and extending the primer in the presence of a first

CC nucleotide that is complementary to a first variant nucleotide suspected

CC to be at a position downstream of the region and a second nucleotide that

CC is complementary to a second variant nucleotide at the position, thus to

CC reduce misincorporation of the first nucleotide on a template comprising

CC the second variant nucleotide. The methods are useful for analysing

CC molecular events for identifying individuals with mutations indicative of

CC cancer. They are particularly useful in detecting a rare mutation in a

CC heterogeneous biological sample (e.g. sporadic mutation in a

CC heterogeneous patient sample), detecting rare genotypes in genotyping

CC reactions (e.g. viral genotyping reactions), or detecting mutant or viral

CC sequences in pooled samples (e.g. detecting polymorphisms or inherited

CC sequence variations in pooled patient samples). This polynucleotide

CC sequence represents an oligo used as part of the primer extension assay

CC of the invention.

XX

SQ Sequence 20 BP; 3 A; 4 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 20;

Best Local Similarity 94.1%; Pred. No. 8.7e+02;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4737 GGAGACCATCTCTCAC 4753

DB 20 GGAGACCATCTCTCAC 4

RESULT 755

ABZ85671/c

ID ABZ85671 standard; DNA; 20 BP.

XX

AC ABZ85671;

XX

DT 17-OCT-2003 (first entry)

XX

DE Human oligonucleotide sequence.

XX

KW Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

XX

KW lung inflammation; respiratory disease; ds.

XX

OS Homo sapiens.

XX

PN WO200285308-A2.

XX

PD 31-OCT-2002.

XX

PF 23-APR-2002; 2002WO-US013135.

XX

PR 24-APR-2001; 2001US-0286137P.

XX

PA (EPIG-) EPIGENESIS PHARM INC.

XX

PI Nyce JW, Li Y, Sandrasegna A, Katz E, Pabalan J, Aguilar D;

XX

DR WPI; 2003-229219/22.

XX

PT Pharmaceutical composition for treating ailments associated with impaired

PT respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

PT ubiquinone.

XX

PS Claim 15; SEQ ID NO 913; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a

CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 20 BP; 3 A; 2 C; 1 G; 14 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5392 TAAATAATTCATAAAA 5408

DB 17 TAAATAATTCATAAAA 1

RESULT 756

ABZ88582 standard; DNA; 20 BP.

XX ABZ88582;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX NYCE JW, Li Y, Sandrasagra A, Katz B, Pabalan J, Aguilar D;

XX PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
XX respiration, has oligo(s) antisense to specific gene(s) or its
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX ubiquinone.

XX Disclosure; SEQ ID NO 3824; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a

CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 20 BP; 3 A; 10 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3277 AGTCCAGCCCGCAGCCT 3293

DB 4 AGTCCAGCCCGCAGCCT 20

RESULT 757

ABZ86072 standard; DNA; 20 BP.

XX ABZ86072;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX NYCE JW, Li Y, Sandrasagra A, Katz B, Pabalan J, Aguilar D;

XX PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
XX respiration, has oligo(s) antisense to specific gene(s) or its
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX ubiquinone.

XX Claim 15; SEQ ID NO 1314; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a

CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in anti-sense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 20 BP; 1 A; 8 C; 6 G; 5 T; 0 U; 0 Other;

Query Match Score 15.4; DB 1; Length 20;

Best Local Similarity 94.1%; Pred. No. 8.7e+02; Mismatches 1; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2646 GCTGCTGCTGCAGCCAC 2662
|||
Db 2 GCTGCTGCTGCTGCCAC 18

RESULT 758
ABD21901/c
ID ABD21901 standard; DNA; 20 BP.

XX ABD21901;

DT 29-JUL-2004 (first entry)

XX Human stemlocalcin-derived oligo SEQ ID 913.

KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

PN MO200285309-A2.

DE 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIC-) EPITGENESIS PHARM INC;

PI Myce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahbuddin S;

XX WPI, 2003-093058/08.

PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.

PS Claim 15, SEQ ID NO 913; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (a) or (b) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it

SQ Sequence 20 BP; 3 A; 2 C; 1 G; 14 T; 0 U; 0 Other;

Query Match Score 15.4; DB 1; Length 20;

Best Local Similarity 94.1%; Pred. No. 8.7e+02; Mismatches 1; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 5392 TAAAAAATACAAAAA 5408
|||
Db 17 TAAAAAATACAAAAA 1

RESULT 759

ABD24812
ID ABD24812 standard; DNA; 20 BP.

XX ABD24812;

DT 29-JUL-2004 (first entry)

XX A1092623-derived oligonucleotide SEQ ID 3824.

KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

PN MO200285309-A2.

DE 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIC-) EPITGENESIS PHARM INC.

XX	NYge JW, Li Y, Sandraseagra A, Katz E, Pabalan J, Agutlar D;
PI	Miller S, Tang L, Shanabuddin S;
XX	WPI; 2003-093058/08.
XX	Pharmaceutical composition for treating asthma, has antilense
PT	oligonucleotide containing less percentage of adenosine, targeted to
PT	nucleic acids associated with lung airway or lung dysfunction, and
PT	bronchodilating agent.
XX	Claim 15; SEQ ID NO 3824; 763bp; English.
XX	This invention describes a novel composition (a) a first active agent,
CC	comprising oligonucleotides, effective for alleviating
CC	bronchoconstriction, respiratory tract inflammation, allergies and
CC	reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC	surfactant depletion or hyposecretion, when administered to a mammal. The
CC	oligonucleotides are derived from a gene encoding or regulating
CC	expression of a target polypeptide associated with lung airway or lung
CC	dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC	The invention also describes a kit, that comprises: (a) a delivery
CC	device, in separate containers, (b) the oligonucleotides, (c)
CC	instructions for adding a carrier and for use of the kit. The composition
CC	of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC	analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC	beta-adrenergic agonist. The composition is useful for preventing or
CC	treating a respiratory, lung or malignant disease. The administered
CC	composition comprises oligo and is administered to reduce the production
CC	or availability, or to increase the degradation of the target mRNA or to
CC	reduce the amount of target polypeptide present in the lungs. The
CC	pulmonary obstruction, and/or bronchoconstriction and/or lung
CC	inflammation, allergies and/or surfactant hypoproduction are associated
CC	with a disease or condition such as pulmonary vasoconstriction,
CC	inflammation, allergies, asthma, impeded respiration, respiratory
CC	distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC	hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC	transplantation rejection, pulmonary infections, bronchitis or cancer.
CC	The reduced adenosine content of the anti-sense oligos corresponding to
CC	thymidines present in the target RNA serves to prevent the breakdown of
CC	the oligonucleotides into products that free adenosine into the system
CC	e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC	prevent any unwanted effects due to it
XX	Sequence 20 BP; 3 A; 10 C; 5 G; 2 T; 0 U; 0 Other;
XX	Query Match 0.3%; Score 15.4; DB 1; Length 20;
XX	Match Local Similarity 94.1%; Pred. No. 8.7e+02;
XX	Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0
QY	3277 AGTCGACGCCGAGCCT 3293
DB	4 AGTCGACGCCGAGCCT 20
RESULT 760	
ABD22302	
ID ABD22302 standard; DNA; 20 BP.	
XX ABD22302;	
XX 29-JUL-2004 (first entry)	
DT	
XX	
DE	Human stannocalcin-derived oligo SEQ ID 1314.
XX	Human, antilense; bronchoconstriction; allergy; hyposecretion; pain;
KM	respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KM	surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KM	analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KM	beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KM	respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KM	emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KM	pulmonary transplantation rejection; ss; primer.

XX OS Homo sapiens.
XX PN WO200285309-A2.
XX PD 31-OCT-2002.
XX PR 23-APR-2002; 2002WO-US013143.
XX PR 24-APR-2001; 2001US-0286036P.
XX PA (EPIC-) EPGENESIS PHARM INC.
PI Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilera D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.

Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.

Claim 15; SEQ ID NO 1314; 763pp; English.

This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic, is a
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target RNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it

XX SQ Sequence 20 BP; 1 A; 8 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2646 GCTGCTGTGCAGCACC 2662
|||
DB 2 GCTGCTGTGTGCCAC 18

RESULT 761
ADH08330/C
ID ADH08330 standard; DNA; 20 BP.
XX
XX ADH08330;
XX

DT 11-MAR-2004 (first entry)
XX
XX Mutant gene fragment designated 248AS1.
DE
XX Biochip; target; ligand; analysis; molecular biology; ds.
KM
XX Homo sapiens.
OS
XX WO2003100423-A2.
PN
XX
XX 04-DEC-2003.
PD
XX
XX 23-MAY-2003; 2003WO-FR001574.
PF
XX
XX 24-MAY-2002; 2002FR-00007039.
PR
XX
XX (APIB-) APIBIO.
PA
XX
XX Cuzin M, Mandrand B, Cleuziat P, Abaïbou H;
PI
XX WPI; 2004-042856/04.
DR
XX
XX Biochip, useful in molecular biology, comprises a central array of sites
PT carrying analytical ligands and a peripheral region containing control
PT sites.
PS
XX Example 2; Page 17; 28pp; French.
PS
XX The invention relates to a biochip (1) that comprises a support (2) the
CC functional side of which has a working surface (3) with a network of
CC elementary sites (Xn), with many ligands, different for each Xn, attached
CC to them. The new feature is that Xn are distributed between: a central
CC zone (4), designed for detection of at least one target species; with
CC each site containing ligands for a particular target; and a peripheral
CC zone (5), surrounding (4) and containing control sites, which optionally
CC carry control ligands. The biochip is used for analysis in molecular
CC biology. The specified arrangement of sites allows not only determination
CC of many targets but also monitoring of the determination and of the
CC operating conditions. The signals emitted from the chip are not affected
CC by the geometrical environment of the chip, for any of the elementary
CC sites. The current sequence represents a fragment of a mutant gene that
CC is related to cancer.
XX
XX
SQ Sequence 20 BP; 3 A; 4 C; 9 G; 4 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 4737 GGAGACCCATCTCACC 4753
DB 20 GGAGGCCCATCTCACC 4
RESULT 762
ADH12202
ID ADH12202 standard; DNA; 20 BP.
XX
XX
AC ADH12202;
XX
DT 11-MAR-2004 (first entry)
XX
XX Human CHD5 PCR/sequencing primer, SEQ ID NO:24.
XX
XX Human: chromodomain helicase DNA-binding 5; CHD5; chromosome 1p36.3;
KM chromatin structure; chromatin unwinding; DNA repair; DNA recombination;
KM transcriptional regulation; gene expression; cell cycle control;
KM development regulation; oncogenesis; brain; neural development;
KM neural tissue neoplasia; diagnosis; cancer; neural cancer; neuroblastoma;
KM breast cancer; colon cancer; liver tumour; germ cell tumour;
KM drug screening; cytostatic; gene therapy; sequencing; PCR; primer; ss.
XX
XX Homo sapiens.
OS

XX
XX WO2003106650-A2.
PN
XX
XX 24-DEC-2003.
PD
XX
XX 16-UTN-2003; 2003WO-US019027.
PF
XX
XX 14-UTN-2002; 2002US-0388848P.
PR
XX
XX (CHIL-) CHILDRENS HOSPITAL PHILADELPHIA.
PA
XX
XX Brodeur GM, White PS;
PI
XX WPI; 2004-082186/08.
DR
XX
XX Novel chromodomain helicase DNA-binding (CHD) proteins, useful as
PT diagnostic and prognostic indicator of tumor, comprises amino terminus
PT having two PHD class zinc finger domains and two chromodomains.
PS
XX Claim 29; SEQ ID NO 24; 124pp; English.
PS
XX The invention relates to human chromodomain, helicase, DNA-binding 5
CC (CHD5; ADH12180) and cDNA encoding it (ADH12179). CHD5 is a novel member
CC of the CHD gene family, members of which have a profound effect on
CC chromatin structure and gene expression and which are thus likely to play
CC an important role in cell cycle control, regulation of development, and
CC oncogenesis. CHD5 comprises two N-terminal zinc finger domains of the PHD
CC (plant homeodomain) class, two chromodomains, a central region which
CC contains a predicted DEAH-box-type helicase domain and a putative SMF2
CC domain, and several nuclear localisation signals. The gene encoding CHD5
CC is located on chromosome 1p36.3, a region frequently deleted in a variety
CC of cancers including neuroblastoma, and the protein is preferentially
CC expressed in brain. CHD5 is therefore thought to be a modulator of normal
CC neural development and neoplasias of neural tissue origin. The invention
CC also relates to vectors and host cells comprising the CHD5 cDNA sequence;
CC an antibody against CHD5; a method of screening for modulators of CHD5
CC activity; a method of diagnosing cancer in a patient, where a reduced
CC level or absence of CHD5 or CHD5 nucleic acids indicates the presence of
CC cancer; treating cancer by administration of CHD5 protein, CHD5-encoding
CC nucleic acids or CHD5 mimetics; and CHD5-specific PCR primers (ADH12186-
CC ADH12247). The methods of the invention are useful in the diagnosis or
CC treatment of cancers such as neural cancers (e.g., neuroblastoma), breast
CC cancer, colon cancer, liver tumours and germ cell tumours. The CHD5
CC protein, CHD5 nucleic acids and anti-CHD5 antibodies are useful as
CC research tools to identify other proteins that are intimately involved in
CC chromatin unwinding, DNA repair and recombination, and transcriptional
CC regulation. Sequences ADH12186-ADH12247 represent specifically claimed
CC human CHD5 PCR primers.
XX
XX
SQ Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3313 CAGAACACCTGGATGA 3329
DB 4 CAGAACACCTGGAGCA 20
RESULT 763
ADJ45268
ID ADJ45268 standard; DNA; 20 BP.
XX
XX
AC ADJ45268;
XX
DT 06-MAY-2004 (first entry)
XX
XX Hepatoma-derived growth factor antisense oligo seqid 38.
DE
XX Cytostatic; endocrine; hepatoma-derived growth factor inhibitor;
KM hepatoma-derived growth factor; metabolic disorder; hyperproliferative;
KM human; ss; antisense oligonucleotide.
XX

```

XX OS Homo sapiens.
XX FH Key
XX modified_base
XX 1. .20
XX /tag= b
XX /mod_base= OTHER
XX /note= "OTHER= Phosphorothioate backbone. All cytidines
XX are 5-methylcytidines"
XX modified_base
XX 1. .5
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX modified_base
XX 15. .20
XX /tag= c
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX US2004023379-A1.
XX PD 05-FEB-2004.
XX PF 31-JUL-2002; 2002US-00210429.
XX PR 31-JUL-2002; 2002US-00210429.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Bennett CF, Dobie KW;
XX PI WPI; 2004-142660/14.
XX DR WPI; 2004-142660/14.
XX PT New compound, particularly an antisense oligonucleotide targeted to a
XX PT nucleic acid encoding a hepatoma-derived growth factor, useful for
XX PT treating a hyperproliferative disorder e.g. cancer, or a metabolic
XX PT disorder.
XX PS Example 15; SEQ ID NO 38; 61pp; English.
XX CC The invention describes a compound 8-80 nucleobases in length targeted
XX CC to, and which specifically hybridizes with a nucleic acid molecule
XX CC encoding hepatoma-derived growth factor, and inhibits the expression of
XX CC hepatoma-derived growth factor. The compound, composition and methods are
XX CC useful for treating a disease or condition associated with hepatoma-
XX CC derived growth factor, such as a metabolic disorder, or a
XX CC hyperproliferative disorder, e.g. cancer, which is selected from
XX CC hepatoma, leiomyoma, esophageal cancer or ovarian cancer. They are also
XX CC useful in research and diagnostics for modulating the expression of
XX CC hepatoma-derived growth factor. This sequence represents a human hepatoma
XX CC derived growth factor antisense oligonucleotide.
XX SQ Sequence 20 BP; 7 A; 7 C; 5 G; 1 T; 0 U; 0 Other;
SQ Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1103 TAGCACCAGAGAGCAG 1119
DB 4 TAGCACCAGAGAGCAG 20
RESULT 764
ADJ45339/c
XX ID ADJ45339 standard; DNA; 20 BP.
XX AC ADJ45339;
XX DT 06-MAY-2004 (first entry)
XX DE Hepatoma-derived growth factor antisense oligo seqid 109.
XX cytosaratic; endocrine; hepatoma-derived growth factor inhibitor;

```

```

KM hepatoma-derived growth factor; metabolic disorder; hyperproliferative;
KM human; ss; antisense oligonucleotide.
XX OS Homo sapiens.
XX FH Key
XX modified_base
XX 1. .20
XX /tag= b
XX /mod_base= OTHER
XX /note= "OTHER= Phosphorothioate backbone. All cytidines
XX are 5-methylcytidines"
XX modified_base
XX 1. .5
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX modified_base
XX 15. .20
XX /tag= c
XX /mod_base= OTHER
XX /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX US2004023379-A1.
XX PD 05-FEB-2004.
XX PF 31-JUL-2002; 2002US-00210429.
XX PR 31-JUL-2002; 2002US-00210429.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Bennett CF, Dobie KW;
XX PI WPI; 2004-142660/14.
XX DR WPI; 2004-142660/14.
XX PT New compound, particularly an antisense oligonucleotide targeted to a
XX PT nucleic acid encoding a hepatoma-derived growth factor, useful for
XX PT treating a hyperproliferative disorder e.g. cancer, or a metabolic
XX PT disorder.
XX PS Example 15; SEQ ID NO 109; 61pp; English.
XX CC The invention describes a compound 8-80 nucleobases in length targeted
XX CC to, and which specifically hybridizes with a nucleic acid molecule
XX CC encoding hepatoma-derived growth factor, and inhibits the expression of
XX CC hepatoma-derived growth factor. The compound, composition and methods are
XX CC useful for treating a disease or condition associated with hepatoma-
XX CC derived growth factor, such as a metabolic disorder, or a
XX CC hyperproliferative disorder, e.g. cancer, which is selected from
XX CC hepatoma, leiomyoma, esophageal cancer or ovarian cancer. They are also
XX CC useful in research and diagnostics for modulating the expression of
XX CC hepatoma-derived growth factor. This sequence represents a human hepatoma
XX CC derived growth factor antisense oligonucleotide.
XX SQ Sequence 20 BP; 1 A; 5 C; 7 G; 7 T; 0 U; 0 Other;
SQ Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1103 TAGCACCAGAGAGCAG 1119
DB 17 TAGCACCAGAGAGCAG 1
RESULT 765
ADJ59589
XX ID ADJ59589 standard; DNA; 20 BP.
XX AC ADJ59589;
XX DT 03-JUN-2004 (first entry)
XX DE Human ESM-1 antisense oligonucleotide seqid 1838.

```

XX cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective;
KM gene therapy; endothelial specific molecule-1; ESM-1;
KM ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury;
KM angiogenic disorder; immunological disorder; cardiovascular disorder;
KM neurological disorder; antisense technology; ss.
XX Homo sapiens.
OS
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= phosphorothioate backbone. All cytidine
FT residues are 5-methylcytidines"
FT 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
FT 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX
XX WO2004021978-A2.
XX
XX 18-MAR-2004.
XX
XX 19-AUG-2003; 2003WO-US025833.
XX
XX 19-AUG-2002; 2002US-0404495P.
XX
XX (PHAA) PHARMACIA CORP.
XX
XX Weinstein EJ, Griggs DW;
XX WPI; 2004-248358/23.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding endothelial specific molecule-1 (ESM-1), useful for preparing a
PT composition for treating e.g., diabetes, cancer or cardiovascular
PT disorder.
XX
XX Claim 3; SEQ ID NO 1838; 555bp; English.
XX
XX The invention describes a new antisense compound, having a sequence
CC comprising 8-30 bp targeted to a nucleic acid encoding endothelial
CC specific molecule-1 (ESM-1), that specifically hybridizes with the
CC nucleic acid ESM-1 and inhibits its expression. Also described are: a
CC composition; inhibiting the expression of ESM-1 in cells or tissues; and
CC treating an animal having a disease or condition associated with ESM-1.
CC The compound is useful for preparing a composition for treating diabetes,
CC cancer, ischaemia or reperfusion injury, or angiogenic, immunological,
CC cardiovascular or neurological disorder. This sequence represents an
CC antisense oligonucleotide that can be used to modulate expression of
CC endothelial specific molecule-1 (ESM-1).
XX
XX Sequence 20 BP; 3 A; 9 C; 4 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2892 CCCAGTCACAGATGCT 2908
Db 3 CCTGTCAACAGATGCT 19
RESULT 766
ADL59612
ID ADL59612 standard; DNA; 20 BP.
XX
XX AC ADL59612;

XX 03-JUN-2004 (first entry)
DT
XX Human ESM-1 antisense oligonucleotide seqid 1861.
DE
XX
XX cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective;
KM gene therapy; endothelial specific molecule-1; ESM-1;
KM ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury;
KM angiogenic disorder; immunological disorder; cardiovascular disorder;
KM neurological disorder; antisense technology; ss.
XX Homo sapiens.
OS
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= phosphorothioate backbone. All cytidine
FT residues are 5-methylcytidines"
FT 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
FT 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX
XX WO2004021978-A2.
XX
XX 18-MAR-2004.
XX
XX 19-AUG-2003; 2003WO-US025833.
XX
XX 19-AUG-2002; 2002US-0404495P.
XX
XX (PHAA) PHARMACIA CORP.
XX
XX Weinstein EJ, Griggs DW;
XX WPI; 2004-248358/23.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding endothelial specific molecule-1 (ESM-1), useful for preparing a
PT composition for treating e.g., diabetes, cancer or cardiovascular
PT disorder.
XX
XX Claim 3; SEQ ID NO 1861; 555bp; English.
XX
XX The invention describes a new antisense compound, having a sequence
CC comprising 8-30 bp targeted to a nucleic acid encoding endothelial
CC specific molecule-1 (ESM-1), that specifically hybridizes with the
CC nucleic acid ESM-1 and inhibits its expression. Also described are: a
CC composition; inhibiting the expression of ESM-1 in cells or tissues; and
CC treating an animal having a disease or condition associated with ESM-1.
CC The compound is useful for preparing a composition for treating diabetes,
CC cancer, ischaemia or reperfusion injury, or angiogenic, immunological,
CC cardiovascular or neurological disorder. This sequence represents an
CC antisense oligonucleotide that can be used to modulate expression of
CC endothelial specific molecule-1 (ESM-1).
XX
XX Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2892 CCCAGTCACAGATGCT 2908
Db 1 CCTGTCAACAGATGCT 17
RESULT 767

ADL58962
ID ADL58962 standard; DNA; 20 BP.
XX
AC ADL58962;
XX
DT 03-JUN-2004 (first entry)
XX
DE Human ESM-1 antisense oligonucleotide seqid 1211.
XX
KW cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective;
KM gene therapy; endothelial specific molecule-1; ESM-1;
KM ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury;
KM angiogenic disorder; immunological disorder; cardiovascular disorder;
KM neurological disorder; antisense technology; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /+tag= b
FT /mod_base= OTHER
FT /note= "OTHER= phosphorothioate backbone. All cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /+tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /+tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN WO2004021978-A2.
XX
PD 18-MAR-2004.
XX
PF 19-AUG-2003; 2003WO-US025833.
XX
PR 19-AUG-2002; 2002US-0404495P.
XX
PA (PHMA) PHARMACIA CORP.
XX
PI Weinstein EJ, Griggs DW;
XX WPI; 2004-248358/23.
XX
DR New antisense compound, having a sequence targeted to a nucleic acid
XX PT encoding endothelial specific molecule-1 (ESM-1), useful for preparing a
XX PT composition for treating e.g., diabetes, cancer or cardiovascular
XX PT disorder.
XX
PS Claim 3; SEQ ID NO 1211; 555bp; English.
XX
XX The invention describes a new antisense compound, having a sequence
XX comprising 8-30 bp targeted to a nucleic acid encoding endothelial
XX specific molecule-1 (ESM-1), that specifically hybridizes with the
XX nucleic acid ESM-1 and inhibits its expression. Also described are: a
XX composition; inhibiting the expression of ESM-1 in cells or tissues; and
XX treating an animal having a disease or condition associated with ESM-1.
XX The compound is useful for preparing a composition for treating diabetes,
XX cancer, ischaemia or reperfusion injury, or angiogenic, immunological,
XX cardiovascular or neurological disorder. This sequence represents an
XX antisense oligonucleotide that can be used to modulate expression of
XX endothelial specific molecule-1 (ESM-1).
SQ Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Db 4 CCCTGTACAGATGCT 20
RESULT 768
ADL59695
ID ADL59695 standard; DNA; 20 BP.
XX
AC ADL59695;
XX
DT 03-JUN-2004 (first entry)
XX
DE Human ESM-1 antisense oligonucleotide seqid 1944.
XX
KW cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective;
KM gene therapy; endothelial specific molecule-1; ESM-1;
KM ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury;
KM angiogenic disorder; immunological disorder; cardiovascular disorder;
KM neurological disorder; antisense technology; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /+tag= b
FT /mod_base= OTHER
FT /note= "OTHER= phosphorothioate backbone. All cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /+tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /+tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN WO2004021978-A2.
XX
PD 18-MAR-2004.
XX
PF 19-AUG-2003; 2003WO-US025833.
XX
PR 19-AUG-2002; 2002US-0404495P.
XX
PA (PHMA) PHARMACIA CORP.
XX
PI Weinstein EJ, Griggs DW;
XX WPI; 2004-248358/23.
XX
DR New antisense compound, having a sequence targeted to a nucleic acid
XX PT encoding endothelial specific molecule-1 (ESM-1), useful for preparing a
XX PT composition for treating e.g., diabetes, cancer or cardiovascular
XX PT disorder.
XX
PS Claim 3; SEQ ID NO 1944; 555bp; English.
XX
XX The invention describes a new antisense compound, having a sequence
XX comprising 8-30 bp targeted to a nucleic acid encoding endothelial
XX specific molecule-1 (ESM-1), that specifically hybridizes with the
XX nucleic acid ESM-1 and inhibits its expression. Also described are: a
XX composition; inhibiting the expression of ESM-1 in cells or tissues; and
XX treating an animal having a disease or condition associated with ESM-1.
XX The compound is useful for preparing a composition for treating diabetes,
XX cancer, ischaemia or reperfusion injury, or angiogenic, immunological,
XX cardiovascular or neurological disorder. This sequence represents an
XX antisense oligonucleotide that can be used to modulate expression of
XX endothelial specific molecule-1 (ESM-1).
SQ Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 2892 CCCAGTCACAGATGCCT 2908
Db 2 CCCTGTACAGATGCCT 18
RESULT 769
ADO42533
ID ADO42533 standard; DNA; 20 BP.
XX ADO42533;
AC ADO42533;
XX
XX 15-JUL-2004 (first entry)
XX
DE Human NOVX PCR primer #4.
XX
XX Human; NOVX; PCR; 89; cancer; atherosclerosis; diabetes;
KW Alzheimer's disease; Parkinson's disease; graft-versus-host disease;
KW scleroderma; hypertension; haemophilia;
KW idiopathic thrombocytopenic purpura; immunodeficiency; AIDS;
KW dyslipidemia; obesity; Crohn's disease; bronchial asthma; anorexia;
KW cancer-associated cachexia; multiple sclerosis; fertility; primer.
XX
OS Homo sapiens.
XX
XX US2004058338-A1.
XX
PD 25-MAR-2004.
XX
PF 02-DEC-2002; 2002US-00307817.
XX
XX 03-DEC-2001; 2001US-0336881P.
PR 05-DEC-2001; 2001US-0336820P.
PR 07-DEC-2001; 2001US-0338285P.
PR 10-DEC-2001; 2001US-0338318P.
PR 10-DEC-2001; 2001US-0339022P.
PR 11-DEC-2001; 2001US-0339314P.
PR 11-DEC-2001; 2001US-0339516P.
PR 11-DEC-2001; 2001US-0339517P.
PR 11-DEC-2001; 2001US-0339611P.
PR 12-DEC-2001; 2001US-0340981P.
PR 12-DEC-2001; 2001US-0341346P.
PR 14-DEC-2001; 2001US-0340390P.
PR 14-DEC-2001; 2001US-0340440P.
PR 14-DEC-2001; 2001US-0340565P.
PR 14-DEC-2001; 2001US-0340608P.
PR 14-DEC-2001; 2001US-0341144P.
PR 17-DEC-2001; 2001US-0341477P.
PR 17-DEC-2001; 2001US-0341540P.
PR 18-DEC-2001; 2001US-0341768P.
PR 20-DEC-2001; 2001US-0342592P.
PR 31-DEC-2001; 2001US-0344033P.
PR 01-FEB-2002; 2002US-0353286P.
PR 01-FEB-2002; 2002US-0353288P.
PR 26-FEB-2002; 2002US-0359599P.
PR 26-FEB-2002; 2002US-0359626P.
PR 26-FEB-2002; 2002US-0359671P.
PR 27-FEB-2002; 2002US-0359914P.
PR 27-FEB-2002; 2002US-0359956P.
PR 28-FEB-2002; 2002US-0360924P.
PR 28-FEB-2002; 2002US-0360964P.
PR 28-FEB-2002; 2002US-0361028P.
PR 28-FEB-2002; 2002US-0361256P.
PR 28-FEB-2002; 2002US-0361264P.
PR 05-MAR-2002; 2002US-0361770P.
PR 05-MAR-2002; 2002US-0362230P.
PR 13-MAR-2002; 2002US-0364181P.
PR 13-MAR-2002; 2002US-0364238P.
PR 15-MAR-2002; 2002US-0364978P.
PR 15-MAR-2002; 2002US-0365025P.
PR 17-APR-2002; 2002US-0373288P.

PR 15-MAY-2002; 2002US-0380981P.
PR 16-MAY-2002; 2002US-0381004P.
PR 17-MAY-2002; 2002US-0381495P.
PR 28-MAY-2002; 2002US-0383534P.
PR 28-MAY-2002; 2002US-0383744P.
PR 29-MAY-2002; 2002US-0383829P.
PR 29-MAY-2002; 2002US-0384024P.
PR 02-JUL-2002; 2002US-0393332P.
PR 06-AUG-2002; 2002US-0401315P.
PR 07-AUG-2002; 2002US-0401788P.
PR 20-AUG-2002; 2002US-0404676P.
PR 23-AUG-2002; 2002US-0405400P.
PR 23-AUG-2002; 2002US-0405684P.
PR 23-AUG-2002; 2002US-0405687P.
PR 23-AUG-2002; 2002US-0405698P.
PR 26-AUG-2002; 2002US-0406353P.
XX
XX (AGER/) AGEH M L.
PA (ALSO/) ALSOBROOK J P.
PA (ANDE/) ANDERSON D W.
PA (BERG/) BERGHS C.
PA (BOLD/) BOLDOG F L.
PA (BURG/) BURGESS C E.
PA (CATT/) CARTERSON E.
PA (DIPI/) DIPIPO V A.
PA (EDIN/) EDINGER S R.
PA (EISE/) EISEN A.
PA (ELLE/) ELLERMAN K.
PA (GANG/) GANGOLLI E A.
PA (GERL/) GERLACH V.
PA (GORM/) GORMAN L.
PA (ROTH/) ROTBERG B G.
PA (GUOX/) GUO X S.
PA (HERR/) HERRMANN J L.
PA (HALV/) HALVORSEN Y.
PA (JTW/) JI W.
PA (KERU/) KERUDA R.
PA (KHRA/) KHRAMTSOV N V.
PA (LARO/) LAROCHELLE W J.
PA (LEPL/) LEIPLEY D M.
PA (LILL/) LI L.
PA (MACD/) MACDOUGALL J R.
PA (MILL/) MILLER C E.
PA (ORTT/) ORT T.
PA (PADI/) PADIGARU M.
PA (PATR/) PATTURAJAN M.
PA (PEYM/) PEYMAN J A.
PA (RIBG/) RIEGER D K.
PA (ROTH/) ROTHENBERG M E.
PA (SHEN/) SHENOY S G.
PA (SMIT/) SMITHSON G.
PA (SPAD/) SPADERNA S K.
PA (SPYT/) SPYTEK K A.
PA (STON/) STONE D J.
PA (TAUP/) TAUPIER R J.
PA (VERN/) VERNET C A M.
PA (VOSS/) VOSS E Z.
PA (ZHON/) ZHONG M.
XX
XX Agee M L, Alsobrook J P, Anderson DW, Berghs C, Boldog FL;
PI Burgess CE, Caterlon B, Diippo VA, Edinger SR, Eisen AJ;
PI Bileman K, Gangolli EA, Gerlach V, Gorman L, Rotberg BG, Guo XS;
PI Hermann J L, Halvorsen Y, Ji W, Kekuda R, Khrantsov NV;
PI Larochele WJ, Lepley DW, Li L, Macdougall JR, Miller CE, Ort T;
PI Padigar M, Patturajan M, Pena CBA, Peyman JA, Rieger DK;
PI Rotenberg WE, Shenoy SG, Smithson G, Spaderna SK, Spytek KA;
PI Stone DJ, Taupier RJ, Vernet CM, Voss EZ, Zhong M;
XX
XX MPI; 2004-268786/25.
PT New human NOVX polypeptides and nucleic acid molecules, useful for
diagnosing, preventing or treating NOVX-associated disorder, e.g. cancer,

PT atherosclerosis, diabetes, Alzheimer's disease, Parkinson's disease or
PT scleroderma.
XX
PS Example D; SEQ ID NO 382; 610bp; English.
XX
CC The invention relates to human NOVX polypeptides and the polynucleotides
CC encoding them. The invention also relates to antibodies specific to the
CC NOVX polypeptides. The polypeptides, polynucleotides and antibodies are
CC useful for manufacturing a medicament for treating a syndrome associated
CC with a human disease, such as a pathology associated with the NOVX
CC polypeptide. The sequences are useful for diagnosing, treating or
CC preventing a NOVX-associated disorder, e.g., cancer, atherosclerosis,
CC diabetes, Alzheimer's disease, Parkinson's disease, graft-versus-host
CC disease, scleroderma, hypertension, haemophilia, idiopathic
CC thrombocytopenic purpura, immunodeficiencies, AIDS, dyslipidemia,
CC obesity, Crohn's disease, bronchial asthma, anorexia, cancer-associated
CC cachexia, multiple sclerosis or fertility. The nucleic acids may be used
CC as hybridisation probes, in chromosome mapping, in tissue typing, in
CC preventive medicine or in pharmacogenomics. This sequence represents a
CC PCR primer used in analysis of expression of a human NOVX polynucleotide
CC of the invention.
XX
SQ Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 4596 ACTGCATGACAGCTGC 4612
Db 1 ACTGCATGACAGCTGC 17
XX
RESULT 770
AAQ67183/c
ID AAQ67183 standard; DNA; 21 BP.
XX
AC AAQ67183;
XX
DT 25-MAR-2003 (revised)
DT 22-MAR-1995 (first entry)
XX
DE Primer for amplifying part of the gag region of HIV.
XX
KW Immunisation; vaccine; therapy; prophylaxis; defective gene;
KW non-functional gene; template; antisense; ribozyme; buptivacaine; HIV;
KW human immunodeficiency virus; ss.
XX
OS Synthetic.
XX
PN MO9416737-A1.
XX
PD 04-AUG-1994.
XX
PF 26-JAN-1994; 94MO-US000899.
XX
PR 26-JAN-1993; 93US-00008342.
PR 11-MAR-1993; 93US-00029336.
PR 15-JUL-1993; 93US-00093235.
PR 21-SEP-1993; 93US-00124962.
PR 21-SEP-1993; 93US-00125012.
XX
PA (WEIN/) WEINER D B.
PA (WILL/) WILLIAMS W V.
PA (WANG/) WANG B.
PA (CONEY/) CONEY L R.
PA (MERV/) MERVA M J.
PA (ZURA/) ZURAWSKI V R.
XX
PI Weiner DB, Williams WV, Wang B, Coney LR, Merva MJ, Zurawski VR;
PI WPI, 1994-263787/32.
XX

PT Method for introducing genetic material into cells - utilises
PT polynucleotide function enhancer and nucleic acid free of retroviral
PT particles, e.g. HIV immunisation.
XX
PS Example 49; Page 109; 136bp; English.
XX
CC Genetic material may be introduced into the cells of an individual by (a)
CC contacting the individual's cells with a polynucleotide function enhancer
CC (bupivacaine) and (b) administering to the cells the nucleic acid
CC molecule free of retroviral particles. Nucleic acid molecules which are
CC delivered to cells may serve as genetic templates for proteins that
CC function as prophylactic and/or therapeutic immunising agents;
CC replacement copies of defective, missing or non-functional genes;
CC templates for therapeutic proteins; genetic templates for antisense
CC molecules or as genetic templates for ribozymes. Two primers (AAQ67182,
CC AAQ67183) were used to amplify part of the gag coding region from a
CC plasmid construct which comprised the 5' LTR and the rest of the HIV-1
CC genome to nucleotide 5795 (Genbank numbering) cloned into the XbaI and
CC SalI sites of Bluescript (The HIV-1 sequences are obtained from the HXB2D
CC plasmid). The amplified sequence was used in the construct designated
CC pGAGPOL.rev2, used to express HIV gag and pol genes. (Updated on 25-MAR-
CC 2003 to correct PN field.)
XX
SQ Sequence 21 BP; 0 A; 4 C; 10 G; 7 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 8.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1261 AGCTACAGCCGCCACCA 1277
Db 18 AGCTACAGCCGCCACCA 2
XX
RESULT 771
AAT00869/c
ID AAT00869 standard; DNA; 21 BP.
XX
AC AAT00869;
XX
DT 16-MAY-1996 (first entry)
DT 16-MAY-1996 (first entry)
XX
DE HIV strain HXB2 gag coding region 3' primer.
XX
KW Immunisation; disease; pathogen; genetic vaccine facilitator; saponin;
KW anionic lipid; lecithin; oestrogen; alkyl; dimethylsulphoxide; urea; PCR;
KW retroviral particle; retrovirus; HIV; SIV; epitope; primer;
KW amplification; ss.
XX
OS Synthetic.
XX
PN WO9526718-A1.
XX
PD 12-OCT-1995.
XX
PF 30-MAR-1995; 95MO-US004071.
XX
PR 01-APR-1994; 94US-00221579.
XX
PA (APOL-) APOLLON INC.
XX
PI Carrano RA;
PI WPI, 1995-358434/46.
XX
DR Introducing genetic material into cells of an individual - by contacting
XX the cells with a genetic vaccine facilitator and a nucleic acid molecule.
XX
PS Example 19; Page 50; 114pp; English.
XX
CC Immunisation of an individual against a disease or pathogen comprises
CC introducing genetic material (a genetic vaccine) into the cell of the
CC individual by contacting the cell with a genetic vaccine facilitator

CC (GVF) selected from anionic lipids, saponins, lectins, oestrogenic cpds.,
 CC hydroxylated lower alkyls, dimethylsulphoxide (DMSO) or urea, and a
 CC nucleic acid that is free of retroviral particles. The primers AAT00830-
 CC 71 are used in the construction of the genetic vaccines based on sequences
 CC of HIV, SIV or pathogenic bacterial epitopes. The primers AAT00868-9 were
 CC used to amplify part of the gag coding region from HIV strain HXB2 for
 CC construction of the genetic vaccine plasmid pGAGPOL.rev2. The plasmid
 CC contains the rev gene from HIV strain HXB2 and the gag open reading frame
 CC (ORF), part of the pol ORF and the rev response element from HIV strain
 CC HXB2
 XX
 SQ Sequence 21 BP; 0 A; 4 C; 10 G; 7 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 15.4; DB 1; Length 21;
 Best Local Similarity 94.1%; Pred. No. 8.8e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1261 AGCTTACAGCCCAACA 1277
 DB 18 AGCCACAGCCCAACA 2
 XX
 RESULT 772
 AAT13768
 ID AAT13768 standard; DNA; 21 BP.
 XX
 AC AAT13768;
 XX
 DT 17-DEC-1996 (first entry)
 XX
 DE Primer for amplifying endoglin exon sequence.
 XX
 DE Endoglin; TGF-beta; beta-glycan; receptor; diagnosis; detection;
 KM gene therapy; haemorrhagic telangiectasia; ss.
 XX
 OS Synthetic.
 XX
 PN WO9616975-A1.
 XX
 PD 06-JUN-1996.
 XX
 PF 29-NOV-1995; 95WO-US015428.
 XX
 PR 29-NOV-1994; 94US-00346129.
 XX
 PA (UYDU-) UNIV DUKE.
 XX
 PA (HSCR-) HSC RES & DEV LP.
 XX
 PI Marchuk DA, Mcallister K, Letarte M;
 XX
 DR WPI; 1996-286827/29.
 XX
 XX Human gene for endoglin (transforming growth factor beta binding protein)
 PT - useful in diagnosis and gene therapy of hereditary haemorrhagic
 PT telangiectasia.
 PT
 XX
 PS Disclosure; Page 13; 71pp; English.
 XX
 CC Oligonucleotides derived from introns of the endoglin gene can be used as
 CC primers for amplifying a single exon of the endoglin gene for its use in
 CC diagnosis of haemorrhagic telangiectasia (HHT). DNA encoding endoglin can
 CC be used for gene therapy of HHT which is caused by inheritance of a
 CC defective gene, e.g. endoglin, beta-glycan, TGF-beta type I or II
 CC receptor or TGF-beta/activin type I receptor. Two primers (AAT13767,
 CC AAT13768) were used to amplify an exon sequence of the endoglin gene.
 CC Primer pairs used in this method are described in AAT13757-78
 XX
 SQ Sequence 21 BP; 6 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
 XX
 Query Match 0.3%; Score 15.4; DB 1; Length 21;
 Best Local Similarity 94.1%; Pred. No. 8.8e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2609 AGGGAGGAACCTGATG 2625
 DB 3 AGGGAGGAACCAATG 19
 XX
 RESULT 773
 AAZ18406/C
 ID AAZ18406 standard; DNA; 21 BP.
 XX
 AC AAZ18406;
 XX
 DT 19-OCT-1999 (first entry)
 XX
 DE Polymorphic fragment in region 5' to ASTH1J.
 XX
 XX ASTH1; asthma; human; chromosome 11p; ASTH1J; ASTH1J; genetic locus;
 KM therapeutic; immunogen; polymorphism; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO937809-A1.
 XX
 PD 29-JUL-1999.
 XX
 PF 21-JAN-1998; 98WO-US001260.
 XX
 PR 21-JAN-1998; 98WO-US001260.
 XX
 PA (AXYS-) AXYS PHARM INC.
 XX
 PI Brooks-Wilson AR, Buckler A, Cardon L, Carey AH, Galvin M,
 PI Miller A, North M;
 XX
 DR WPI; 1999-479058/40.
 XX
 PT Mammalian asthma related genes, useful for diagnosis of a predisposition
 PT to development of asthma.
 PT
 XX
 PS Disclosure; Page 62; 195pp; English.
 XX
 CC The invention identifies a genetic locus ASTH1, associated with asthma,
 CC mapped to human chromosome 11p. ASTH1 and ASTH1J are genes present
 CC within the locus, located close to each other on human chromosome 11p,
 CC and have similar patterns of expression, and common sequence motifs. The
 CC ASTH1 genes and fragments, encoded protein, genomic regulatory regions
 CC and anti-ASTH1 antibodies are useful in the identification of individuals
 CC predisposed to development of asthma, and for the modulation of gene
 CC activity in vivo for prophylactic and therapeutic purposes. The ASTH1
 CC protein is useful as an immunogen to raise specific antibodies, in drug
 CC screening for compositions that mimic or modulate ASTH1 activity or
 CC expression, including altered forms of ASTH1 protein, and as a
 CC therapeutic. Sequences AAZ18366-Z18509 represent polymorphisms in the
 CC ASTH1 and ASTH1J genes
 XX
 SQ Sequence 21 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 1 Other;
 XX
 Query Match 0.3%; Score 15.4; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 8.8e+02;
 Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 QY 4891 ACAAGTTGCCATCTGCTT 4909
 DB 20 ACAAGTTGCGTCTGCTT 2
 XX
 RESULT 774
 AAZ97503
 ID AAZ97503 standard; DNA; 21 BP.
 XX
 AC AAZ97503;
 XX
 DT 15-SEP-2003 (revised)
 DT 26-APR-2000 (first entry)


```

XX XX HIV-1 protease gene PCR primer SEQ ID NO:3.
DB XX
XX XX Human immunodeficiency virus; HIV; protease; probe; detection;
KM drug selected mutation; hybridisation; genotyping; infection;
KM drug resistance; PCR primer; ss.
XX XX
XX OS Human immunodeficiency virus 1.
XX XX
XX PN MO9967428-A2.
XX XX
XX PD 29-DEC-1999.
XX XX
XX PF 22-JUN-1999; 99WO-EP004317.
XX XX
XX PR 24-JUN-1998; 98EP-00870143.
XX XX
XX PA (INNO-) INNOGENETICS NV.
XX XX
XX PI Stuyver L;
XX XX
XX DR WPI; 2000-147219/13.
XX XX
XX PT Detection of drug-selected mutations in the HIV protease gene used to
XX treat HIV infections.
XX XX
XX PS Claim 4; Page 19; 76pp; English.
XX XX
XX CC The present invention describes the detection of drug-selected mutations
XX in the HIV protease gene. The method of detection allows the simultaneous
XX characterisation of a range of codons involved in drug resistance using
XX sets of probes optimised to function together in a reverse-hybridisation
XX assay. AA297517 to AA297997 represent specifically claimed probes for use
XX in the assay, and AA297479 to AA297501 represent specifically claimed HIV
XX protease gene polymorphic nucleotide sequences. AA297502 to AA297515, and
XX AA298004 to AA298007, represent PCR primers for the HIV protease gene,
XX and AA297516 represents an HIV protease probe used in an example from the
XX present invention. The method, probes and primers can be used for the
XX detection of drug-selected mutations in the HIV protease gene. The method
XX allows the simultaneous characterisation of a range of codons involved in
XX drug resistance. The method may also be used for HIV protease genotyping
XX assays. The probes are able to discriminate between wild type and mutated
XX protease sequences. The method allows rapid and reliable detection of
XX drug-selected mutation in HIV. (Updated on 15-SEP-2003 to standardise OS
XX field)
XX CC
XX CC
XX SQ Sequence 21 BP; 7 A; 10 C; 4 G; 0 T; 0 U; 0 Other;
XX XX
XX Query Match 0.3%; Score 15.4; DB 1; Length 21;
XX Best Local Similarity 94.1%; Pred. No. 8.8e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX XX
QY 1261 AGCTACAGCCCAACCA 1277
DB 4 AGCCACAGCCCAACCA 20
XX XX
RESULT 775
AA297507
ID AA297507 standard; DNA; 21 BP.
XX XX
XX AC AA297507;
XX XX
XX DT 15-SEP-2003 (revised)
XX DT 26-APR-2000 (first entry)
XX XX
XX DB HIV-1 protease gene PCR primer SEQ ID NO:502.
XX XX
XX KM Human immunodeficiency virus; HIV; protease; probe; detection;
XX KM drug selected mutation; hybridisation; genotyping; infection;
XX KM drug resistance; PCR primer; ss.
XX OS Human immunodeficiency virus 1.

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XX XX MO9967428-A2.
XX PN
XX PD 29-DEC-1999.
XX XX
XX PF 22-JUN-1999; 99WO-EP004317.
XX XX
XX PR 24-JUN-1998; 98EP-00870143.
XX XX
XX PA (INNO-) INNOGENETICS NV.
XX XX
XX PI Stuyver L;
XX XX
XX DR WPI; 2000-147219/13.
XX XX
XX PT Detection of drug-selected mutations in the HIV protease gene used to
XX treat HIV infections.
XX XX
XX PS Example 1; Page 20; 76pp; English.
XX XX
XX CC The present invention describes the detection of drug-selected mutations
XX in the HIV protease gene. The method of detection allows the simultaneous
XX characterisation of a range of codons involved in drug resistance using
XX sets of probes optimised to function together in a reverse-hybridisation
XX assay. AA297517 to AA297997 represent specifically claimed probes for use
XX in the assay, and AA297479 to AA297501 represent specifically claimed HIV
XX protease gene polymorphic nucleotide sequences. AA297502 to AA297515, and
XX AA298004 to AA298007, represent PCR primers for the HIV protease gene,
XX and AA297516 represents an HIV protease probe used in an example from the
XX present invention. The method, probes and primers can be used for the
XX detection of drug-selected mutations in the HIV protease gene. The method
XX allows the simultaneous characterisation of a range of codons involved in
XX drug resistance. The method may also be used for HIV protease genotyping
XX assays. The probes are able to discriminate between wild type and mutated
XX protease sequences. The method allows rapid and reliable detection of
XX drug-selected mutation in HIV. (Updated on 15-SEP-2003 to standardise OS
XX field)
XX CC
XX CC
XX SQ Sequence 21 BP; 7 A; 10 C; 4 G; 0 T; 0 U; 0 Other;
XX XX
XX Query Match 0.3%; Score 15.4; DB 1; Length 21;
XX Best Local Similarity 94.1%; Pred. No. 8.8e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX XX
QY 1261 AGCTACAGCCCAACCA 1277
DB 4 AGCCACAGCCCAACCA 20
XX XX
RESULT 776
AA277203/C
ID AA277203 standard; DNA; 21 BP.
XX XX
XX AC AA277203;
XX XX
XX DT 10-SEP-2001 (first entry)
XX DT
XX XX
XX DE Human biallelic marker downstream amplification primer SEQ ID NO:11559.
XX XX
XX KM Human genome; biallelic marker; high density disequilibrium map;
XX KM genomic map; haplotype; phenotype; polymorphic base; genotyping;
XX KM haplotyping; hybridisation; identification; characterisation;
XX KM amplification; single nucleotide polymorphism; SNP; PCR primer;
XX KM diagnosis; ss.
XX XX
XX OS Homo sapiens.
XX XX
XX PN MO9954500-A2.
XX XX
XX PD 28-OCT-1999.
XX XX
XX PF 21-APR-1999; 99WO-IB000822.
XX XX

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```
PR 21-APR-1998; 98US-0082614P.
PR 23-NOV-1998; 98US-0109732P.
XX
XX (GENSET ) GENSET.
XX
PI Cohen D, Blumenfeld M, Chumakov I;
XX
XX WPI; 2000-013267/01.
XX
PT Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX
XX Claim 9; Page 2695; 2745pp; English.
XX
XX AA265654 to AA269578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AA269579 to AA277440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
XX Sequence 21 BP; 3 A; 7 C; 2 G; 9 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 8.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2129 GGAGGAGAAACTCACA 2145
DB 20 GGAGGAGAAAACTCAGA 4
RESULT 777
AA295599
ID AA295599 standard; DNA; 21 BP.
XX
XX AA295599;
AC
XX
XX 07-JUN-2000 (first entry)
XX
XX Human endoglin PCR primer SEQ ID NO:31.
XX
XX Human; endoglin; hereditary haemorrhagic telangiectasia; HHT;
KM Osler-Weber-Rendu disease; diagnosis; identification; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX US6022687-A.
XX
XX 08-FEB-2000.
XX
XX 29-NOV-1995; 95US-00564496.
XX
XX 29-NOV-1994; 94US-00346129.
XX
XX (UYDU-) UNIV DUKE.
XX
XX Marchuk DA, Mcallister K, Letarte M;
PI
XX WPI; 2000-222459/19.
XX
XX Diagnosing hereditary hemorrhagic telangiectasia by identifying genetic
PT mutations that lead to susceptibility to the disease.
XX
```

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PS Disclosure; Col 7-8; 40pp; English.
XX
XX The present invention describes a method (I) for diagnosing, or
CC identifying a predisposition to, hereditary haemorrhagic telangiectasia
CC (HHT) (also called Osler-Weber-Rendu disease) comprising determining
CC whether a sample of genomic DNA from the subject contains a mutation in
CC the gene encoding endoglin (the mutation is indicative of a
CC predisposition to HHT). The method may be used for diagnosing (or
CC identifying individuals with a predisposition to developing) HHT. The
CC present sequence represents a PCR primer for the human endoglin gene,
CC which is used in the exemplification of the present invention
XX
XX Sequence 21 BP; 6 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 8.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2609 AGGGGAGGAACCTGATG 2625
DB 3 AGGGGAGGAACCGATG 19
RESULT 778
AAH21622/c
ID AAH21622 standard; RNA; 21 BP.
XX
XX AAH21622;
AC
XX
XX 13-AUG-2001 (first entry)
XX
XX Bovine RTS homology transported mRNA NOS SEQ ID NO:11.
DE
XX
XX Myelin basic protein; MBP; cis-acting mRNA transport sequence; RTS;
KM cis-acting mRNA localisation enhancer; RLE; gene therapy; localisation;
KW transport; translation; ss.
XX
XX Bos taurus.
XX
XX US6225082-B1.
XX
XX 01-MAY-2001.
XX
XX 09-MAY-1997; 97US-00853980.
XX
XX 09-MAY-1997; 97US-00853980.
XX
XX (RESE ) RESEARCH CORP TECHNOLOGIES INC.
XX
XX Carson J, Kwon S, Ainger K, Avobssa D;
PI
XX WPI; 2001-307679/32.
XX
XX Novel nucleic acid molecule having cis-acting mRNA transport sequence or
PT localisation enhancer which enhance transport or localization of mRNA
PT within cytoplasm, respectively, is useful for enhancing gene therapy.
XX
XX Example 3; Fig 3; 39pp; English.
XX
XX The present invention describes an isolated nucleic acid molecule (I)
CC consisting of a cis-acting mRNA transport sequence (RTS) (Ia) of a myelin
CC basic protein (MBP) cDNA or its portion that enhances transport of mRNA
CC within the cytoplasm, or consisting of a cis-acting mRNA localisation
CC enhancer (RLE) (Ib) of MBP cDNA or its portion which enhances
CC localisation of mRNA within the cytoplasm. (I) placed 5' or 3' to a
CC heterologous gene that is operably linked to a 5' regulatory region and a
CC 3' termination sequence, in an expression vector is useful for expressing
CC a heterologous gene which involves transforming a host cell with the
CC expression vector. (I) confers properties such as localisation, transport
CC and increased translation efficiency of a heterologous mRNA transcript
CC when transcribed into such mRNA. (I) present in a vector is useful for
CC increasing translation of a heterologous gene, by which increased
CC production of recombinantly produced proteins in vivo on either a small,
```

CC research scale or on a large commercial scale is increased. The
 CC recombinantly produced proteins whose translation is enhanced by (I) may
 CC be a biologically active protein, structural or therapeutic protein. (I)
 CC is useful in gene therapy. The present sequence represents a transcribed
 CC mRNA sequence with R15 homology, which is used in the exemplification of
 CC the present invention

XX Sequence 21 BP; 8 A; 6 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 21;

Best Local Similarity 94.1%; Pred. No. 8.8e+02; Mismatches 1; Indels 0; Gaps 0;

DB 81 CTGCTCTGCGGCTCTC 97
 20 CTGCTCTGCGGCTCTC 4

RESULT 779

AAAF1461/c
 ID AAAF1461 standard; DNA; 21 BP.

AC AAAF1461;

DT 10-APR-2001 (first entry)

XX Oligonucleotide used to make target duplex.

XX Gene expression; gene therapy; diagnosis; ss.

XX Synthetic.

XX MO200102423-A2.

XX 11-JAN-2001.

XX 07-JUL-2000; 2000MO-US018609.

XX 07-JUL-1999; 99US-00349040.

XX (ISIS-) ISIS PHARM INC.

XX Manoharan M, Cook PD, Prakash TP, Mohan V;

XX WPI; 2001-138119/14.

XX Guanidinium functionalized oligomers prepared from corresponding monomer
 PT units, are hybridizable with a specific RNA or DNA sequence, useful for
 PT diagnostic and therapeutic purposes.

XX Example 36; Page 62; 108bp; English.

XX The present invention relates to nucleotide oligomers comprising monomer
 CC units. Oligomers modulate gene expression when hybridized by a single- or
 CC double-stranded nucleic acid. They are useful for gene therapy,
 CC diagnostic and investigative purposes

XX Sequence 21 BP; 2 A; 7 C; 2 G; 10 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 21;

Best Local Similarity 94.1%; Pred. No. 8.8e+02; Mismatches 1; Indels 0; Gaps 0;

QY 1186 AGAGAGAGAGAGAAATC 1202

DB 18 AGAGAGAGAGAGAAATC 2

RESULT 780

AAAF6199
 ID AAAF6199 standard; DNA; 21 BP.

XX AAFA6199;

XX 06-JUN-2001 (first entry)

XX Human gene single nucleotide polymorphism #960.

XX Human; variant thrombospondin 1; variant thrombospondin 4; SNP;

XX polymorphism; vascular disease; coronary artery disease; forensics;

XX myocardial infarction; atherosclerosis; stroke; venous thromboembolism;

XX pulmonary embolism; paternity test; de.

XX Homo sapiens.

XX Key Location/Qualifiers

XX Variation replace(11,A)

XX /tag= a

XX /standard_name= "single nucleotide polymorphism"

XX MO200118250-A2.

XX 15-MAR-2001.

XX 07-SEP-2000; 2000MO-US024503.

XX 10-SEP-1999; 99US-0153357P.

XX 26-JUL-2000; 2000US-0220947P.

XX 16-AUG-2000; 2000US-0225724P.

XX (WHD) WHITEHEAD INST BIOMEDICAL RES.

XX (WHL-) WILHELMINIUM PHARM INC.

XX Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, McCarthy JU;

XX WPI; 2001-226749/23.

XX Nucleic acids comprising single nucleotide polymorphisms, useful in

XX applications such as forensics, paternity testing, medicine, genetic

XX analysis and phenotype correlations to diseases such as diabetes and

XX atherosclerosis.

XX Example; Page 116; 242pp; English.

XX The present invention provides a method of diagnosing a vascular disease

XX in an individual, involving determining the sequence at various

XX polymorphic sites within the human thrombospondin 1 and thrombospondin 4

XX genes. The sequences at a number of polymorphic sites are also provided

XX in the specification. In particular, the method can be used in the

XX diagnosis of atherosclerosis, myocardial infarction, coronary heart

XX disease, stroke, peripheral vascular diseases, venous thromboembolism and

XX pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also

XX useful in forensics, paternity testing, genetic analysis and phenotype

XX correlations to diseases. The present sequence is an example of one of

XX the human gene SNPs shown in the specification

XX Sequence 21 BP; 7 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 21;

Best Local Similarity 94.1%; Pred. No. 8.8e+02; Mismatches 1; Indels 0; Gaps 0;

QY 3573 AGAGAGGCGGCTTCCC 3589

DB 5 AGAGAGGCGGGAATCCC 21

RESULT 781

AAAF1636
 ID AAFA1636 standard; DNA; 21 BP.

XX AAFA1636;

XX 24-OCT-2001 (first entry)

XX Human CYP2B6 allele sequencing primer seqCYP2B6-P2P for promoter region.

```

XX CYP2B6; cytostatic; gene therapy; genotyping; cancer; metabolism; ss;
KM human; cancer susceptibility; environmental carcinogen;
KM sequencing primer.
XX Homo sapiens.
OS
PN WO200159152-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001MO-EP001456.
XX
PR 09-FEB-2000; 2000BP-00102701.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Zanger UM, Lang T;
XX
DR WPI; 2001-502719/55.
XX
PT New polynucleotide(s) of the polymorphic human CYP2B6 gene for the
PT detection and treatment of disorders i.e. cancer.
XX
PS Claim 36; Page 46; 83pp; English.
XX
XX The sequence represents a sequencing primer used to sequence the promoter
CC region of the human CYP2B6 gene. It is used for specific detection and
CC genotyping of CYP2B6 alleles in humans, determination of which is useful
CC for the optimisation of therapies utilising CYP2B6 substrates.
CC Oligonucleotide sequences are useful in detection of the individual
CC predisposition to several common cancers caused by environmental
CC carcinogens, and diseases treated with drugs that are targets of the
CC CYP2B6 gene product, whose metabolism is therefore dependent on CYP2B6.
CC Cancer or susceptibility to cancer can be diagnosed by detecting the
CC presence of a molecular variant of CYP2B6. From variants of the alleles,
CC modulators of the activity can be developed for use in treatment and
CC prevention of CYP2B6-related disorders
XX
SQ Sequence 21 BP; 1 A; 7 C; 3 G; 10 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 8.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 4869 GTCTCAGTTTCTTCTC 4885
DB 1 GTCTCAGTTTCTTCTC 17
RESULT 782
AAF27878/c
ID AAF27878 strand; DNA; 21 BP.
XX
AC AAF27878;
XX
DT 30-MAR-2001 (first entry)
XX
DE Human NOV7 PCR forward primer Ag 6.
XX
XX Human; NOVX; antiinflammatory; cytostatic; neuroprotective;
KM cerebroprotective; immunomodulator; vulnery; vasotropic; gene therapy;
KM hyperplasia; tumour; restenosis; psoriasis; Dupuytren's contracture;
KM diabetes; rheumatoid arthritis; cerebral oedema; Alzheimer's disease;
KM PCR primer; probe; ss.
XX
OS Homo sapiens.
XX
PN WO200075321-A2.
XX
PD 14-DEC-2000.
XX
PF 01-JUN-2000; 2000MO-US015303.

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XX 03-JUN-1999; 99US-0137322P.
PR 16-MAR-2000; 2000US-0189810P.
PR 22-MAR-2000; 2000US-0191158P.
PR 30-MAR-2000; 2000US-0193086P.
PR 31-MAY-2000; 2000US-00137322.
XX
XX (CURA-) CURAGEN CORP.
XX
PI Shimkete RA, Fernandes B, Herrman J, Vernet C;
XX
DR WPI; 2001-102403/11.
XX
PT New NOVX polypeptides and polynucleotides, useful in gene therapy, as a
PT diagnostic marker, protein therapeutic, antibody or small molecule drug
PT target for treating immune, proliferative and metabolic diseases and
PT wound healing.
XX
PS Example 2; Page 165; 194pp; English.
XX
XX The present sequence was used to isolate a new isolated polypeptide
CC (NOVX). The NOVX polypeptides, NOVX nucleic acids, and anti-NOVX
CC antibodies are useful for treating or preventing NOVX-associated
CC disorders. They are also useful for determining the presence of or a
CC predisposition to a disease associated with altered levels of the NOVX
CC polypeptide or nucleic acid. These NOVX-associated disorders include
CC hyperplasia, tumours, restenosis, psoriasis, Dupuytren's contracture,
CC diabetic complications, rheumatoid arthritis, cerebral lesions, diabetic
CC neuropathies, cerebral oedema, senile dementia or Alzheimer's disease.
CC The NOVX polynucleotides are especially useful in gene therapy.
CC Specifically, NOVX is useful as a diagnostic marker or prognostic marker,
CC protein therapeutic and antibody target or small molecule drug target to
CC treat disorders in the immune response pathway, thyroid and metabolic
CC diseases, bone metabolic disorders, diseases of the pancreas (e.g.
CC diabetes or digestive disorders), proliferative diseases, or tissue
CC regeneration and development (e.g. wound healing or treatment of burns)
XX
SQ Sequence 21 BP; 8 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 8.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1925 CTTCTTTGGAGCAGCA 1941
DB 20 CTTCTTTGGAGCAGCA 4
RESULT 783
ACD40283/c
ID ACD40283 strand; DNA; 21 BP.
XX
AC ACD40283;
XX
DT 03-SEP-2003 (first entry)
XX
DE Breast tumour associated protein 47-like polypeptide NOV7 forward primer.
XX
XX Tissue typing; cancer; breast cancer; colon cancer; lung cancer; sarcoma;
KM pancreatic cancer; uterine cancer; organ transplantation disorder; ss;
KM cardiovascular disease; melanoma; atherosclerosis; diabetes mellitus;
KM ischaemic heart disease; haemorrhage; peripheral vascular disease; PCR;
KM thrombosis; hypertension; systemic lupus erythematosus; haematopoiesis;
KM tissue regeneration; wound healing; hyperproliferative disorder; primer;
KM psoriasis; neural disorder; Parkinson's disease; Alzheimer's disease;
KM Huntington's disease; multiple sclerosis; amyotrophic lateral sclerosis;
KM ALS; peripheral neuropathy; nervous system tumour; neurotoxin; tremor;
KM neuropathy; acute brain injury; peripheral nerve trauma; human; NOVX;
KM gene therapy; epilepsy; breast tumour associated protein 47.
XX
OS Homo sapiens.
XX
PN US2003027158-A1.

```

PD	06-FEB-2003.
PF	15-OCT-2001, 2001US-00977418.
XX	
XX	03-JUN-1999; 99US-0137322P.
PR	16-MAR-2000; 2000US-0189810P.
PR	22-MAR-2000; 2000US-0191158P.
PR	30-MAR-2000; 2000US-0193086P.
PR	03-MAY-2000; 2000US-0201388P.
PR	31-MAY-2000; 2000US-00584411.
XX	
PA	(CURA-) CURAGEN CORP.
PI	Shinketsu RA, Fernandes E, Herrman J, Vernet C;
PI	WPI; 2003-492028/46.
XX	
PT	New nucleic acid sequence encoding a human breast tumor-associated
PT	protein 47-like polypeptide, useful for treating cardiovascular
XX	disorders, neural disorders, diabetes mellitus and cancers.
XX	
XX	Example 2; Page 89; 100pp; English.
CC	
CC	The invention relates to a new isolated NOV4 nucleic acid. The nucleic
CC	acid is useful for identifying a compound that binds the nucleic acid.
CC	The nucleic acid is useful in gene therapy, in screening assays, in
CC	detection assays e.g. chromosomal mapping, cell and tissue typing and
CC	forensic biology, predictive medicine e.g. diagnostic assays, prognostic
CC	assays, monitoring clinical trials and pharmacogenomics and methods of
CC	treatment including therapeutic and prophylactic. The nucleic acid is
CC	also useful for expressing NOV4 protein. The nucleic acid is also useful
CC	to provide polynucleotide reagents e.g. labeled probes that are useful
CC	in an in situ hybridization technique, for identifying a specific tissue
CC	(for example brain tissue) and for use in forensic science. The nucleic
CC	acid is also useful for mapping genes on a chromosome and thus locating
CC	gene regions associated with genetic disease, identifying an individual
CC	from a minute biological sample and to aid in forensic identification of
CC	biological sample. The nucleic acid is also useful for treating cancer,
CC	especially cancers of the breast, colon, lung, pancreas or uterus, or a
CC	melanoma or sarcoma. The nucleic acid is also useful for treating
CC	disorders related to organ transplantation, cardiovascular diseases,
CC	atherosclerosis, ischaemic heart disease, haemorrhage, diabetes mellitus,
CC	peripheral vascular disease, thrombosis, hypertension and systemic lupus
CC	erythematosus. NOV4 protein encoded by the nucleic acid is useful for
CC	regulating hematopoiesis, for regeneration of bone, cartilage, tendon
CC	ligament and/or nerve tissue growth or regeneration and for wound
CC	healing. The nucleic acid is also useful for treating infections,
CC	hyperproliferative disorders e.g. psoriasis, and neural disorders
CC	including Parkinson's disease, Alzheimer's disease, Huntington's disease,
CC	multiple sclerosis, amyotrophic lateral sclerosis (ALS), peripheral
CC	neuropathy, tumors of the nervous system, exposure to neurotoxins, acute
CC	brain injury, peripheral nerve trauma or injury and other neuropathies,
CC	epilepsy, and/or tremors. The present sequence represents a human breast
CC	tumour associated protein 47-like polypeptide PCR primer
XX	
XX	Sequence 21 BP; 8 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
QY	
QY	Query Match 0.3%; Score 15.4; DB 1; Length 21;
QY	Best Local Similarity 94.1%; Pred. No. 8.8e-02;
QY	Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY	1925 CTTCTTTGGAGCAGCA 1941
QY	
QY	
QY	
QY	
QY	20 CTTCTTTGGAGCAGCA 4
DB	
DB	1925 CTTCTTTGGAGCAGCA 1941
DB	
DB	
DB	
DB	
DB	20 CTTCTTTGGAGCAGCA 4
DB	
DB	1925 CTTCTTTGGAGCAGCA 1941
DB	
DB	
DB	
DB	
DB	20 CTTCTTTGGAGCAGCA 4
DB	
DB	1925 CTTCTTTGGAGCAGCA 1941
DB	
DB	
DB	
DB	
DB	20 CTTCTTTGGAGCAGCA 4
DB	
DB	1925 CTTCTTTGGAGCAGCA 1941
DB	
DB	
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DB	
DB	20 CTTCTTTGGAGCAGCA 4
DB	
DB	1925 CTTCTTTGGAGCAGCA 1941
DB	
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DB	20 CTTCTTTGGAGCAGCA 4
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DB	1925 CTTCTTTGGAGCAGCA 1941
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DB	
DB	20 CTTCTTTGGAGCAGCA 4
DB	
DB	1925 CTTCTTTGGAGCAGCA 1941
DB	
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DB	
DB	20 CTTCTTTGGAGCAGCA 4
DB	
DB	1925 CTTCTTTGGAGCAGCA 1941
DB	
DB	
DB	
DB	
DB	20 CTT

DT	15-APR-2004	(first entry)
XX		
DE	Synthetically modified nuclease resistant oligomer #6.	
XX		
KW	Nuclease resistance; hybrid binding; antisense technology; ss.	
XX		
OS	Synthetic.	
XX		
PN	US6534639-B1.	
PD	18-MAR-2003.	
XX		
PP	07-JUL-2000; 2000US-00612531.	
XX		
PR	07-JUL-1999; 99US-00349040.	
XX		
PA	(ISIS-) ISIS PHARM INC.	
XX		
PI	Manoharan M, Cook PD, Prakash TP, Mohan V;	
XX		
DR	WPI; 2003-644179/61.	
XX		
PT	Guanidinium functionalized oligonucleotides used for diagnostic,	
PT	therapeutic or investigative purposes comprises a number of nucleotide	
PT	units.	
XX		
PS	Example 26, SEQ ID NO 6, 51pp; English.	
XX		
CC	This invention relates to novel synthetically modified oligomers that	
CC	have increased nuclease resistance and have enhanced hybrid binding. Such	
CC	oligomers are useful for diagnostic and therapeutic uses such as	
CC	antisense technologies. The invention also discloses a method for the	
CC	preparation of the oligomers with modifications as fully defined in the	
CC	specification. The present sequence represents a synthetically modified	
CC	oligonucleotide of the invention.	
XX		
SQ	Sequence 21 BP; 2 A; 7 C; 2 G; 10 T; 0 U; 0 Other;	
XX		
Query Match	0.3%;	Score 15.4; DB 1; Length 21;
Best Local Similarity	94.1%;	Pred. No. 8.8e+02;
Matches 16; Conservative 0;	Mismatches 1;	Indels 0; Gaps 0;
QY	1186 AGAGAGAGAGGAATC 1202	
DB	18 AGAGAGAGAGAAAATC 2	
RESULT 785		
ADJ13812/C		
ID	ADJ13812 standard; DNA; 21 BP.	
XX		
AC	ADJ13812;	
XX		
DT	20-MAY-2004 (first entry)	
XX		
DE	Human DNA probe used to immobilise CpG methylated DNA SegID 939.	
XX		
KW	probe; ss; chemical modification; methylation; array; CpG island;	
KW	tumour suppressor; p16; human; H69; H1618.	
XX		
OS	Homo sapiens.	
XX		
PN	US2003152950-A1.	
PD	14-AUG-2003.	
XX		
PP	27-JUN-2002; 2002US-00184085.	
XX		
PR	27-JUN-2001; 2001US-0301370P.	
XX		
PA	(GARN/) GARNER H R.	
PA	(MINN/) MINNA J D.	
PA	(LUEB/) LUEBKE K J.	

PA (BALO/) BALOG R P.
XX
PI Garner HR, Minna JD, Luebke KJ, Balog RP;
XX
XX WPI; 2003-874843/81.
XX
XX Analysis of chemical modification of DNA involves obtaining sample of DNA
PT to be analyzed, treating DNA with chemical reagents that result in
PT different base sequences, and determining sequence of resulting DNA.
XX
PS Example 1; SEQ ID NO 939; 210pp; English.
XX
XX This invention relates to a novel method for analysing chemically
CC modified macromolecules. Specifically, it refers to a high throughput
CC method for the parallel analysis of many potential sites of chemical
CC modification (e.g. methylation) in DNA. The present invention describes
CC treating the DNA with one or more chemical reagents that result in
CC different base sequences depending upon the presence or absence of the
CC modification of interest. Accordingly, a device comprising an array of
CC probes is provided to hybridise with and select the altered DNA sequences
CC that comprise the modifications of interest such as a CpG island. In
CC particular, this invention refers to analysing the methylation pattern of
CC a region of the promoter for the tumour suppressor gene p16 from two
CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
CC is a human DNA probe used to immobilise CpG methylated DNA of the
CC invention.
XX
SQ Sequence 21 BP; 2 A; 12 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 8.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2436 GGATGAGAGGGGAGAG 2452
DB 17 GGATGAGAGGGGAGAG 1

RESULT 786
ADJ13106/c
ID ADJ13106 standard; DNA; 21 BP.
XX
XX ADJ13106;
AC
XX
XX 20-MAY-2004 (first entry)
DT
XX
XX Human DNA probe used to immobilise CpG methylated DNA SeqID 233.
DE
XX
XX probe; ss; chemical modification; methylation; array; CpG island;
XX tumour suppressor; p16; human; H69; H1618.
XX
XX Homo sapiens.
OS
XX
XX US2003152950-A1.
XX
XX 14-AUG-2003.
PD
XX
XX 27-JUN-2002; 2002US-00184085.
PF
XX
XX 27-JUN-2001; 2001US-0301370P.
PR
XX
XX (GARN/) GARNER H R.
PA (MINN/) MINNA J D.
PA (LUEB/) LUEBKE K J.
PA (BALO/) BALOG R P.
XX
XX Garner HR, Minna JD, Luebke KJ, Balog RP;
PI
XX
XX WPI; 2003-874843/81.
XX
XX Analysis of chemical modification of DNA involves obtaining sample of DNA
PT to be analyzed, treating DNA with chemical reagents that result in
PT different base sequences, and determining sequence of resulting DNA.

XX
PS Example 1; SEQ ID NO 233; 210pp; English.
XX
XX This invention relates to a novel method for analysing chemically
CC modified macromolecules. Specifically, it refers to a high throughput
CC method for the parallel analysis of many potential sites of chemical
CC modification (e.g. methylation) in DNA. The present invention describes
CC treating the DNA with one or more chemical reagents that result in
CC different base sequences depending upon the presence or absence of the
CC modification of interest. Accordingly, a device comprising an array of
CC probes is provided to hybridise with and select the altered DNA sequences
CC that comprise the modifications of interest such as a CpG island. In
CC particular, this invention refers to analysing the methylation pattern of
CC a region of the promoter for the tumour suppressor gene p16 from two
CC human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
CC is a human DNA probe used to immobilise CpG methylated DNA of the
CC invention.
XX
SQ Sequence 21 BP; 4 A; 12 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 8.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2438 ATGAGAGGGGAGAGGT 2454
DB 21 ATGAGAGGGGAGAGGT 5

RESULT 787
ADJ13699/c
ID ADJ13699 standard; DNA; 21 BP.
XX
XX ADJ13699;
AC
XX
XX 20-MAY-2004 (first entry)
DT
XX
XX Human DNA probe used to immobilise CpG methylated DNA SeqID 826.
DE
XX
XX probe; ss; chemical modification; methylation; array; CpG island;
XX tumour suppressor; p16; human; H69; H1618.
XX
XX Homo sapiens.
OS
XX
XX US2003152950-A1.
XX
XX 14-AUG-2003.
PD
XX
XX 27-JUN-2002; 2002US-00184085.
PF
XX
XX 27-JUN-2001; 2001US-0301370P.
PR
XX
XX (GARN/) GARNER H R.
PA (MINN/) MINNA J D.
PA (LUEB/) LUEBKE K J.
PA (BALO/) BALOG R P.
XX
XX Garner HR, Minna JD, Luebke KJ, Balog RP;
PI
XX
XX WPI; 2003-874843/81.
XX
XX Analysis of chemical modification of DNA involves obtaining sample of DNA
PT to be analyzed, treating DNA with chemical reagents that result in
PT different base sequences, and determining sequence of resulting DNA.
XX
XX Example 1; SEQ ID NO 826; 210pp; English.
XX
XX This invention relates to a novel method for analysing chemically
CC modified macromolecules. Specifically, it refers to a high throughput
CC method for the parallel analysis of many potential sites of chemical
CC modification (e.g. methylation) in DNA. The present invention describes
CC treating the DNA with one or more chemical reagents that result in
CC different base sequences depending upon the presence or absence of the

modification of interest. Accordingly, a device comprising an array of CC probes is provided to hybridise with and select the altered DNA sequences CC that comprise the modifications of interest such as a CpG island. In CC particular, this invention refers to analysing the methylation pattern of CC a region of the promoter for the tumour suppressor gene p16 from two CC human lung tumour cell lines H69 and H4618. This oligonucleotide sequence CC is a human DNA probe used to immobilise CpG methylated DNA of the CC invention.

XX Sequence 21 BP, 3 A, 12 C, 1 G, 5 T, 0 U, 0 Other;

SQ Query Match 0.3%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 8.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2437 GATGAGAGGCGGAGAGG 2453
DB 21 GATGAGAGGCGGAGAGG 5

RESULT 788
ADM56417/c
XX ADM56417 standard; DNA; 21 BP.
AC ADM56417;
XX
XX 03-JUN-2004 (first entry)
XX
XX Human cell adhesion molecule NOV7 RTQ-PCR primer #1.
DE
XX
XX Human; ss; PCR; cell adhesion molecule; NOV7; cancer; leukaemia;
KM lymphoma; melanoma; neurological disorder; epilepsy; Alzheimer's disease;
KM ischaemic cerebrovascular disease; stroke; Alzheimer's disease;
KM Pick's disease; vesicular transport disorder; cystic fibrosis;
KM diabetes mellitus; Grave's disease; goiter; gastrointestinal disorder;
KM ulcerative colitis; gastric ulcer; duodenal disorder; autoimmune disease;
KM allergic reaction; autoimmune haemolytic anaemia; rheumatoid arthritis;
KM viral infection; bacterial infection; fungal infection;
KM helminthic infection; protozoal infections; primer; RTQ-PCR;
KM real time quantitative PCR.
KM
XX
XX Homo sapiens.
OS
XX
XX US2003082554-A1.
PN
XX
XX 01-MAY-2003.
PD
XX
XX 15-OCT-2001; 2001US-00977033.
PF
XX
XX 03-JUN-1999; 99US-0137322P.
PR 16-MAR-2000; 2000US-0189810P.
PR 22-MAR-2000; 2000US-0191158P.
PR 30-MAR-2000; 2000US-0193086P.
PR 03-MAY-2000; 2000US-0201388P.
PR 31-MAY-2000; 2000US-00584411.
PR
XX
XX (CURA-) CURAGEN CORP.
PA
XX
XX Shimkova RA, Fernandes E, Herzman J, Vernet C;
PI WPI; 2003-616079/58.
XX
XX New nucleic acids encoding human cell adhesion molecule-like proteins,
PT useful for treating e.g. cancers, neurological disorders, viral,
PT bacterial, fungal, helminthic and protozoal infections.
XX
XX Example 2; SEQ ID NO 53; 78pp; English.
PS
XX The invention relates to an isolated nucleic acid encoding a human cell
CC adhesion molecule-like protein, comprising a sequence encoding a
CC polypeptide having a sequence appearing as ADM56387, a sequence at least
CC 90% identical to the nucleic acid, a sequence encoding a polypeptide
CC having conservative amino acid substitutions to the protein or a fragment

comprising at least 20 nucleotides. Also included are an oligonucleotide CC sequence that is complementary to (and hybridises under stringent CC conditions with) the nucleic acid (or a portion of it), a vector CC comprising the nucleic acid, a cell comprising the vector, a CC pharmaceutical composition comprising the nucleic acid and a CC pharmaceutical carrier, a process for producing the polypeptide, a CC process for identifying a compound that binds the nucleic acid, and a CC compound identified by the process. Disclosed as new are the cDNA and CC proteins for novel cell adhesion molecules (termed NOVX, being NOV1-23). CC The NOVX polypeptide, nucleic acid or antibody are useful in the CC manufacture of a medicament for treating a syndrome associated with a CC human disease selected from NOVX-associated disorder, such as cancers CC (e.g. leukaemia, lymphoma, melanoma or cancer of the liver, lung, muscle, CC ovary, testis and uterus), neurological disorder (e.g. epilepsy, CC ischaemic cerebrovascular disease, stroke, Alzheimer's disease or Pick's CC disease), disorders of vesicular transport (e.g. cystic fibrosis, CC diabetes mellitus, Grave's disease, or goiter), gastrointestinal CC disorders (e.g. ulcerative colitis, or gastric and duodenal disorders), CC autoimmune diseases (e.g. allergic reactions, autoimmune haemolytic CC anaemia, or rheumatoid arthritis), viral, bacterial, fungal, helminthic CC and protozoal infections. The polypeptides can be used as immunogens to CC produce antibodies and as vaccines. The sequences may further be used in CC chromosome mapping, identifying individual from minute biological samples CC (tissue typing), and in forensic identification of a biological sample. CC NOTE: The authors have mis-labelled the sequences as they appear on pages CC 12-28 of the patent, it is clear from table 3, the examples and the CC claims that the SEQ ID numbers for the cDNAs should be the odd numbers CC from 1-45 and the proteins should be the even numbers from 2-46. The CC present sequence is a real time quantitative (RTQ) PCR primer for a CC nucleic acid encoding a NOVX cell adhesion molecule of the invention.

XX Sequence 21 BP; 8 A, 4 C, 6 G, 3 T, 0 U, 0 Other;

SQ Query Match 0.3%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 8.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1925 CTTCTTGGAGCAGGCA 1941
DB 20 CTTCTTGGAGCAGGCA 4

RESULT 789
ADPF6780/c
XX ADPF6780 standard; DNA; 21 BP.
AC ADPF6780;
XX
XX 12-FEB-2004 (first entry)
DT
XX
XX Novel human protein NOV7 primer seq id 53.
DE
XX
XX cytostatic; hepatotropic; vulnery; antiporiatic; osteopathic;
KM antiarthritic; antiatherosclerotic; haemostatic; vasotopic;
KM thrombolytic; antidiabetic; hypotensive; dermatological;
KM immunosuppressive; antiinflammatory; immunostimulant; fungicide;
KM virucide; protozoacide; neuroprotective; antirheumatic; antiarthritic;
KM antiasthmatic; antiparkinsonian; nootropic; anticonvulsant;
KM NOVX modulator; cancer; hyperproliferative disease; cirrhosis; keloid;
KM psoriasis; tissue hypertrophy; osteoarthritis;
KM atherosclerotic plaque formation; haemorrhage; ischaemic disease;
KM thrombosis; diabetes mellitus; hypertension; hypothyroidism;
KM immune deficiency; severe combined immunodeficiency; SCID; infection;
KM malaria; candidiasis; autoimmune disorder; connective tissue disease;
KM multiple sclerosis; systemic lupus; erythematous; rheumatoid arthritis;
KM autoimmune pulmonary inflammation; Guillain-Barre syndrome;
KM autoimmune thyroiditis; insulin dependent diabetes mellitus;
KM myasthenia gravis; graft-versus-host disease;
KM autoimmune inflammatory eye disease; asthma; haemoptosis;
KM tissue regeneration; wound healing; tissue repair; burn; incision; ulcer;
KM periodontal disease; Alzheimer's disease; Parkinson's disease;
KM Huntington's disease; amyotrophic lateral sclerosis; Shy-Drager syndrome;
KM human; PCR; primer; ss.

```
XX OS Homo sapiens.
XX XX US200319103-A1.
XX PD 23-OCT-2003.
XX PF 15-OCT-2001; 2001US-00977639.
XX PR 03-JUN-1999; 99US-0137322P.
XX PR 16-MAR-2000; 2000US-0189810P.
XX PR 22-MAR-2000; 2000US-0191158P.
XX PR 30-MAR-2000; 2000US-0193086P.
XX PR 03-MAY-2000; 2000US-0201388P.
XX PR 31-MAY-2000; 2000US-00584411.
XX PA (CURA-) CURAGEN CORP.
XX PI Shimkets RA, Fernandes E, Herrman J, Vernet C;
XX DR WPI; 2004-021196/02.
XX PT Novel substantially NOVX polypeptide useful for diagnosing, preventing
XX PT and treating diseases e.g., cancer, multiple sclerosis, systemic lupus
XX PT erythematosus.
XX PS Example 2; SEQ ID NO 53; 165pp; English.
XX XX
XX CC The invention describes a substantially purified polypeptide (I) having
XX CC amino acids as given in the specification, or polypeptide having one or
XX CC more conservative amino acid substitutions of (S1), or mutant or variant
XX CC of (S1). (I) having (S1) is useful for diagnosing a pathological
XX CC condition associated with (I) or its activity in a subject e.g., cancer.
XX CC (I) useful in treatment of cancer, hyperproliferative diseases,
XX CC cirrhosis, keloid, psoriasis, tissue hypertrophy, osteoarthritis,
XX CC atherosclerotic plaque formation, haemorrhage, ischaemic heart or renal
XX CC disease, thrombosis, diabetes mellitus, hypertension, hypothyroidism. (I)
XX CC is useful in treatment of various immune deficiencies and disorders such
XX CC as severe combined immunodeficiency (SCID), bacterial infection, viral
XX CC infection such as herpes viral infection, protozoan infection such as
XX CC malaria, fungal infection such as candidiasis. (I) is also useful in
XX CC treating autoimmune disorders such as connective tissue disease, multiple
XX CC sclerosis, systemic lupus, erythematosus, rheumatoid arthritis,
XX CC autoimmune pulmonary inflammation, Guillain-Barre syndrome, autoimmune
XX CC thyroiditis, insulin dependent diabetes mellitus, myasthenia gravis,
XX CC graft-versus-host disease and autoimmune inflammatory eye disease and
XX CC asthma. (I) useful in regulation of haematopoiesis, regeneration and
XX CC tissue growth of bone, cartilage, tendon, ligament and useful for wound
XX CC healing and tissue repair. (I) is also useful in treatment of burns,
XX CC incisions and ulcers. (I) also useful in treatment of periodontal
XX CC disease, Alzheimer's disease, Parkinson's disease, Huntington's disease,
XX CC amyotrophic lateral sclerosis, and Shy-Drager syndrome. (I) has effective
XX CC antitumour and antiinflammatory activity. This sequence represents a
XX CC primer used in the isolation of DNA encoding a novel human NOVX protein.
XX XX
XX SQ Sequence 21 BP; 8 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 15.4; DB 1; Length 21;
XX Best Local Similarity 94.1%; Pred. No. 8.8e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1925 CTTCTTGGAGCAGCA 1941
XX Db 20 CTTCTTGGAGCAGCA 4
XX
XX RESULT 790
XX ADF91944/c
XX ID ADF91944 standard; DNA; 21 BP.
XX XX
XX AC ADF91944;
XX XX
```

```
DT 26-FEB-2004 (first entry)
XX DE Human cytokерatin 18-derived P1c DNA - SEQ ID 32.
XX XX
XX KW human; cytokерatin; CK; LAMP; loop mediated isothermal amplification;
XX KW tumour metastasis; prostate cancer; lymphoma; human; CK18; ss; primer;
XX KW probe; PCR; P1c.
XX XX
XX OS Homo sapiens.
XX PN WO2003097878-A1.
XX XX
XX PD 27-NOV-2003.
XX PF 20-MAY-2003; 2003WO-JP006256.
XX PR 21-MAY-2002; 2002JP-00145689.
XX PR 17-JUN-2002; 2002JP-00175271.
XX PR 09-JUL-2002; 2002JP-00199759.
XX PA (SYSM-) SYSMEX CORP.
XX PI Tada S, Akai Y, Imura Y, Abe S, Minekawa H;
XX DR WPI; 2004-012543/01.
XX PT LAMP nucleic acid amplification primers for detection of cytokерatin
XX PT expression as indicator in diagnosis of tumour metastasis.
XX PS Claim 3; SEQ ID NO 32; 26pp; Japanese.
XX XX
XX CC The invention relates to novel nucleic acid amplification primers for the
XX CC detection of human cytokерatin (CK) 18, 19 or 20 expression by the LAMP
XX CC (loop mediated isothermal amplification) method. The primers of the
XX CC invention may be useful for the detecting cytokерatin 18-20 expression as
XX CC an indicator for the diagnosis of tumour metastasis, particularly
XX CC prostate cancer and lymphoma. The amplification using the primers is
XX CC highly efficient and allows very sensitive detection of tumour
XX CC metastasis. The current sequence is that of the human CK18-derived DNA of
XX CC the invention.
XX XX
XX SQ Sequence 21 BP; 2 A; 7 C; 6 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 15.4; DB 1; Length 21;
XX Best Local Similarity 94.1%; Pred. No. 8.8e+02;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2216 GACCCGAGCTCAGAGAC 2232
XX Db 21 GACCCGAGCTCAGAGAC 5
XX
XX RESULT 791
XX ID ADG47997/c
XX AC ADG47997;
XX XX
XX DT 11-MAR-2004 (first entry)
XX DE Duplex DNA strand 2 used for triplex formation.
XX KW Hybridisation; diagnosis; therapeutic; investigation; ds.
XX OS Unidentified.
XX OS
XX PN US2003092046-A1.
XX XX
XX PD 15-MAY-2003.
XX PF 20-SEP-2002; 2002US-00247893.
XX XX
XX PR 07-JUL-1999; 99US-00349040.
```


PR 07-JUL-2000; 2000US-00612531.
XX
XX (MANO/) MANOHARAN M.
PA (COOK/) COOK P D.
PA (PRAK/) PRAKASH T P.
PA (MOHA/) MOHAN V.
XX
PI Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
XX WPI, 2004-031184/03.
XX
XX New oligomers containing guanidinium groups, useful for modulating gene
PT expression by hybridizing oligomer with single- or double-stranded
PT nucleic acids.
XX
XX Example 36; SEQ ID NO 6; 54bp; English.
XX
XX The present invention relates to novel oligonucleotides comprising
CC several nucleotide units which are specifically hybridizable with a
CC selected sequence of RNA or DNA wherein at least one of the nucleotide
CC moieties of the oligomer is modified to include a guanidinium group.
CC These oligonucleotides are useful for diagnostic, therapeutic and
CC investigative purposes. The present sequence is a duplex DNA strand 1
CC used for triplex formation in the exemplification of the invention.
XX
XX
SQ Sequence 21 BP; 2 A; 7 C; 2 G; 10 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 8.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1186 AGAGAGAGAGAGAAATC 1202
DB 18 AGAGAGAGAGAGAAATC 2
RESULT 792
ADH42938/C
ID ADH42938 standard; DNA; 21 BP.
XX
XX ADH42938;
AC
XX
XX 25-MAR-2004 (first entry)
DT
XX
XX Guanidinium functionalised oligonucleotide triplex formation strand 1.
DB
XX
XX 5b; guanidinium functionalised nucleotide; guanidinium;
KM 2-O-guanidinium ethyl; increased binding affinity; triplex formation.
XX
XX Synthetic.
OS
XX
XX US6593466-B1.
FN
XX
XX 15-JUL-2003.
PD
XX
XX 07-JUL-1999; 99US-00349040.
PF
XX
XX 07-JUL-1999; 99US-00349040.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Manoharan M, Cook PD, Prakash TP, Mohan V;
PI
XX
XX WPI, 2004-118052/12.
DR
XX
XX New guanidinium functionalized nucleotide compounds useful for preparing
PT oligomers used for diagnostic, therapeutic and investigative
PT applications.
XX
XX Example 36; SEQ ID NO 10; 40bp; English.
PS
XX
XX The invention relates to a guanidinium functionalised nucleotide
CC compound. The guanidinium functionalised nucleotide compounds are used

CC for preparation of oligomers useful for diagnostic, therapeutic and
CC investigative applications. The 2-O-guanidinium ethyl modification
CC increases binding affinity to a target. The present sequence represents
CC the sense strand of a duplex DNA sequence used to form a triplex with
CC guanidinium functionalised oligonucleotides.
XX
XX
SQ Sequence 21 BP; 2 A; 7 C; 2 G; 10 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 8.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1186 AGAGAGAGAGAGAAATC 1202
DB 18 AGAGAGAGAGAGAAATC 2
RESULT 793
ADH68562
ID ADH68562 standard; DNA; 21 BP.
XX
XX ADH68562;
AC
XX
XX 25-MAR-2004 (first entry)
DT
XX
XX Rosa sp reverse PCR primer for microsatellite marker RMS091.
DE
XX
XX microsatellite marker; rose genome; PCR; hypervariable region;
KM genetic mapping; relatedness analysis; hybrid identification; plant;
KW breeding; primer; ss.
XX
XX
OS Rosa sp.
XX
XX W02003097869-A2.
PN
XX
XX 27-NOV-2003.
PD
XX
XX 16-MAY-2003; 2003WO-DE001572.
PF
XX
XX 17-MAY-2002; 2002DE-01022632.
PR
XX
XX (CONC-) CON CIPRO GMBH.
PA
XX
XX Suees K;
PI
XX
XX WPI, 2004-012541/01.
DR
XX
XX New oligonucleotides from rose microsatellite markers, useful for genomic
PT analysis, including identification of varieties and hybrids.
PT
XX
XX Claim 1; Page 9; 52pp; German.
PS
XX
XX This invention describes novel oligonucleotides derived from
CC microsatellite markers and used for the amplification of the rose genome.
CC The invention also describes a test kit for genetic analysis of cultured
CC or wild forms of the genus Rosa sp. that contains at least one of the new
CC oligonucleotide primers and preparing microsatellite markers of Rosa sp.
CC by PCR amplification of hypervariable genomic regions, using at least one
CC primer pair, to produce polymorphic fragments which are separated and
CC detected. The primer pairs flank the microsatellite locus being
CC amplified. The amplified markers are separated by electrophoresis,
CC especially on high-resolution agarose or native or denatured
CC polyacrylamide gels, or by mass spectrometry. After separation, the
CC amplicons are detected by staining (ethidium bromide or silver),
CC radioactive labelling and autoradiography, automated sequencing using
CC primers labelled with dyes or fluorophores or by mass spectrometry. A
CC genomic library of 0.5-1.5 kb fragments from the rose variety
CC 'Lichtblick' was constructed in pUC18 and used to transform Escherichia
CC coli and the cells tested against a high-density array of synthetic
CC microsatellites. Inserts in plasmids that hybridised were sequenced and
CC the identified sequences selected for ability to differentiate between a
CC set of 30 rose varieties. The oligonucleotides are used for genetic
CC analysis of cultivated and wild types of roses, particularly for genetic

CC mapping and labelling of mono- or poly-genic traits, selection, analysis
 CC of relatedness, identification of varieties and evaluation of varietal
 CC purity, identification of hybrids and plant breeding. The
 CC oligonucleotides are useful in automated processes, do not require
 CC radioactive detection methods and can differentiate between almost all
 CC commercial rose varieties. ADH6375-ADH6874 represent the PCR primers
 CC used to amplify the Rose microsatellite regions described in the method
 CC of the invention.
 SQ Sequence 21 BP; 3 A; 9 C; 2 G; 7 T; 0 U; 0 Other;
 QY Query Match 0.3%; Score 15.4; DB 1; Length 21;
 Best Local Similarity 94.1%; Pred. No. 8.8e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Db 5 CTTCTCTCTGCTCTCA 21

RESULT 794
 AD119817/C
 ID AD119817 standard; DNA; 21 BP.
 AC AD119817;
 DT 22-APR-2004 (first entry)
 DE Human NOV7 DNA amplifying PCR primer, Ag 6 (P).
 XX
 XX
 XX Secreted protein; NOVX; diagnosis; metabolic disorder; diabetes; obesity;
 XX infection; anorexia; cancer; cardiovascular disease; hypertension;
 XX atherosclerosis; neurodegenerative disorder; Alzheimer's disease;
 XX Parkinson's disease; epilepsy; immune disorder; osteoarthritis;
 XX haematopoietic disorder; inflammatory skin disorder; asthma;
 XX dyslipidemia; neurogenesis; cell differentiation; cell proliferation;
 XX haemotopoiesis; wound healing; angiogenesis; chromosome mapping;
 XX tissue typing; preventive medicine; pharmacogenomics; gene therapy;
 XX anorectic; cardiant; virucide; antibacterial; fungicide; protozoicide;
 XX neurotropic; neuroprotective; dermatological; human; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX US2004002134-A1.
 PN
 XX
 PD 01-JAN-2004.
 XX
 PF 15-OCT-2001; 2001US-00977819.
 XX
 XX 03-JUN-1999; 99US-0137322P.
 XX 16-MAR-2000; 2000US-0189810P.
 PR 22-MAR-2000; 2000US-0191158P.
 PR 30-MAR-2000; 2000US-0193086P.
 PR 03-MAY-2000; 2000US-0201388P.
 PR 31-MAY-2000; 2000US-00584411.
 XX
 XX (CURA-) CURAGEN CORP.
 PA
 XX
 PI Shimkets RA, Fernandes ER, Herrman UL, Vernet CM;
 XX WPI; 2004-070737/07.
 DR
 XX
 XX New NOVX nucleic acids encoding human KIAA0768 protein-like and human
 PT protein PRO-226 polypeptides, useful for treating NOVX-associated
 PT disorders.
 XX
 XX Example 2; SEQ ID NO 53; 95bp; English.
 XX
 CC The present invention is based in part on the discovery of novel secreted
 CC and membran-bound polypeptides and their encoding polynucleotides. The
 CC nucleic acids and polypeptides are collectively referred as NOVX. The
 CC invention is useful for treating, preventing and diagnosing diseases such
 CC as metabolic disorders, diabetes, obesity, infectious diseases such as

CC viral, bacterial, fungal, helminthic and protozoal infections, anorexia,
 CC cancer, cardiovascular diseases such as hypertension and atherosclerosis,
 CC neurodegenerative disorders, Alzheimer's disease, Parkinson's disease,
 CC epilepsy, immune disorders such as osteoarthritis, haematopoietic
 CC disorders, inflammatory skin disorders, asthma and various dyslipidemias.
 CC The invention is also useful as targets for the identification of small
 CC molecules that modulate or inhibit e.g. neurogenesis, cell
 CC differentiation, cell proliferation, haematopoiesis, wound healing and
 CC angiogenesis, as hybridisation probes, in chromosome mapping, tissue
 CC typing, preventive medicine and pharmacogenomics. The invention is also
 CC useful in gene therapy. The present sequence is human NOV DNA amplifying
 CC PCR primer.
 SQ Sequence 21 BP; 8 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
 QY Query Match 0.3%; Score 15.4; DB 1; Length 21;
 Best Local Similarity 94.1%; Pred. No. 8.8e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Db 20 CTTCTTGAGCATGCA 4

RESULT 795
 ADJ31660
 ID ADJ31660 standard; DNA; 21 BP.
 AC ADJ31660;
 DT 22-APR-2004 (first entry)
 DE Human haem oxygenase 1 DNA amplifying reverse PCR primer.
 XX
 XX
 XX Haem oxygenase 1; HO; hyperbilirubinaemia; neonatal jaundice;
 XX neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
 XX antisenese-therapy; neurotropic; neuroprotective; human; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX US2003235913-A1.
 PN
 XX
 PD 25-DEC-2003.
 XX
 PF 20-JUN-2002; 2002US-00178258.
 XX
 PR 20-JUN-2002; 2002US-00178258.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Doble KW;
 XX
 XX WPI; 2004-070587/07.
 DR
 XX
 XX New antisense oligonucleotide compounds, useful for diagnosing,
 PT preventing and/or treating conditions with aberrant activity of heme
 PT oxygenase 1, such as hyperbilirubinaemia, neonatal jaundice and
 PT neurodegenerative diseases.
 XX
 XX Example 13; SEQ ID NO 6; 43bp; English.
 PS
 XX
 CC The present invention relates to antisense compounds, compositions and
 CC methods used for modulating the expression of haem oxygenase (HO) 1. The
 CC methods and compositions of the present invention are useful for the
 CC diagnosis, prevention and/or treatment of diseases or conditions
 CC associated with aberrant expression or activity of haem oxygenase 1 such
 CC as hyperbilirubinaemia, neonatal jaundice and neurodegenerative diseases
 CC like Alzheimer's and Parkinson's disease. The invention is also useful in
 CC antisense-therapy. The present sequence is human haem oxygenase 1 DNA
 CC amplifying PCR primer used in the exemplification of the invention.
 XX
 SQ Sequence 21 BP; 5 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

Query Match	0.3%	Score 15.4	DB 1	Length 21
Best Local Similarity	94.1%	Pred. No. 8.8e+02		
Matches 16	Conservative 0	Mismatches 1	Indels 0	Gaps 0

```

Qy      928 GTTTTGAGACAGCTGCC 944
          |||||
Db      1 GTTTGAGACAGCTGCC 17

```

RESULT 796
ADL70483/c
ID ADL70483 standard; RNA; 21 BP.

DB RNAi for human insulin-like growth factor binding protein-5.

KM RNA interference; RNAi; short interfering RNA; siRNA; human;
 KM insulin-like growth factor binding protein-5; cytotactin;
 KM neuroprotective; nontropic; gene silencing; IGFBP-5; DNA-RNA hybrid; B6
 XX
 OS Homo sapiens.
 OS Synthetic.

	Key	Location/qualifiers
FH	modified_base	20..21
FT		/*tag= a
FT		/mod_base= OTHER
FT		/note= "OTHER= dtdt"

PN WO2004018676-A2.

PD 04-MAR-2004

PF 21-AUG-2003, 2003WO-CA001277.

PR 21-AUG-2002; 2002US-0405193P.
PR 03-SEP-2002; 2002US-0408152P.
PR 20-MAY-2003; 2003US-0472387P.

PA (UYBR-) UNIV BRITISH COLUMBIA.

PI Jansen B, Gleave ME, Sigmaevsky M, Beraldi E, Troughakos IP,
PI Gonos ES;

DR WPI; 2004-226852/21.

PT New RNA molecule less than 49 bases and having a sequence effective to
PT mediate degradation or block translation of mRNA that is the
PT transcriptional product of a target gene, useful for treating Alzheimer's
PT disease or cancer.

PS Claim 5; SEQ ID NO 28; 63pp; English.

The present sequence is the antisense strand of a short interfering RNA (siRNA) targeted to nucleotides 1225-1243 of human insulin-like growth factor binding protein-5 (IGFBP-5) cDNA. The sense strand is also provided ABD70482. The siRNA can be used to interfere with the expression of IGFBP-5. Inhibition of IGFBP-5 expression can delay the progression of hormone-regulated (prostatic or breast) tumour cells to hormone independence, provide a method for the treatment of hormone-regulated cancers, and inhibit or delay the growth and metastatic progression of prostate, breast and other IGF-1 sensitive tumours in bone. siRNAs of the invention can be used alone or in combination with other chemotherapy or apoptosis inducing treatments for the treatment of prostate cancer, sarcomas such as osteosarcoma, renal cell carcinoma, breast cancer, bladder cancer, lung cancer, colon cancer, ovarian cancer, anaplastic large cell lymphoma and melanoma, and also for the treatment of Alzheimer's disease.

SQ Sequence 21 BP; 2 A; 5 C; 6 G; 2 T; 6 U; 0 Other;

Query March	0.3%	Score 15.4;	DB 1;	Length 21;
Best: Local Similarity	94.1%;	Pred. No. 8.8e+02;		
Matches 16; Conservative	0;	Mismatches 1;	Indels 0;	Gaps 0;

```

QY      1634 AGCTGGCCCACTCCAAG 1650
          ||||| ||||| |||||
Db      17  AGCTGACCCAGTCCAAG 1

```

RESULT 797
ADO60290/c
ID ADO60290 standard; DNA; 21 BP.

DB Human NOV7 DNA specific PCR primer, Ag 6 (F).

KM Human; NVX protein; cancer; hypertrophic; osteoarthritis; cirrhosis;
KM beloid; psoriasis; tissue hypertrophy; osteoarthritis;
KM atherosclerotic plaque formation; haemorrhage; ischaemic heart disease;
KM renal disease; chromostasis; diabetes mellitus; hypertension;
KM hypochylodism; severe combined immunodeficiency; SCID; infection;
KM malaria; candidiasis; autoimmune disorder; connective tissue disease;
KM multiple sclerosis; systemic lupus erythematosus; rheumatoid arthritis;
KM autoimmune pulmonary inflammation; Guillain-Barre syndrome;
KM autoimmune thyroiditis; myasthenia gravis; graft-versus-host disease;
KM autoimmune inflammatory eye disease; asthma; burn; incision; ulcer;
KM periodontal disease; Alzheimer's disease; Parkinson's disease;
KM Huntington's disease; amyotrophic lateral sclerosis; Shy-Drager syndrome;
KM haemotopolesis; wound healing; tissue repair; antitumor;
KM antiinflammatory; PCR; primer; ss

OS Homo sapiens.

PN US2003134430-A1

PD 17-JUL-2003

PF 15-OCT-2001; 2001US-00977751.

PR 03-JUN-1999; 99US-01373322P
PR 16-MAR-2000; 2000US-0186910P
PR 22-MAR-2000; 2000US-0191158P
PR 30-MAR-2000; 2000US-0193086P
PR 03-MAY-2000; 2000US-0201388P
PR 31-MAY-2000; 2000US-00584411

PA (CURA-) CURAGEN CORP.

Shlmkets RA, Fernandes B, Herrman J, Vernet C,

DR WPI; 2004-068928/07.

PT Novel substantially purified NOVX polypeptide for treating severe combined immunodeficiency, candidiasis, cancer, asthma, multiple sclerosis, systemic lupus erythematosus.

XX

Example 2; SEQ ID NO 53; 155pp; English.

CC The invention relates to human NOVX poly

CC The invention relates to human NOX polypeptides and polynucleotides.
CC NOX sequences are useful in the treatment of cancer, hyperproliferative
CC diseases, cirrhosis, keloid, psoriasis, tissue hypertrophy,
CC osteoarthritis, atherosclerotic plaque formation, haemorrhage, ischaemic
CC heart or renal disease, thrombosis, diabetes mellitus, hypertension,
CC hypothyroidism, asthma, burns, incisions, ulcers, periodontal disease,
CC Alzheimer's disease, Parkinson's disease, Huntington's disease,
CC amyotrophic lateral sclerosis, Shy-Drager syndrome, immune deficiencies
CC and disorders such as severe combined immunodeficiency (SCID), bacterial
CC infection, viral infection e.g. herpes viral infection, protozoan
CC infection e.g. malaria, fungal infection e.g. candidiasis, autoimmune

CC disorders such as connective tissue disease, multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, autoimmune pulmonary inflammation, Guillain-Barre syndrome, autoimmune thyroiditis, insulin dependent diabetes mellitus, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. The invention is useful in regeneration and tissue growth of bone, cartilage, tendon, ligament, haematopoiesis regulation, wound healing and tissue repair. Sequences of CC the invention also exhibit antitumor and antiinflammatory activities. The CC present sequence is human NOVX DNA specific PCR primer used in the CC exemplification of the invention.

XX
SQ Sequence 21 BP; 8 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 21;
Best Local Similarity 94.1%; Pred. No. 8.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1925 CTTCTTTGACGACGCA 1941
DB 20 CTTCTTTGACGACGCA 4

RESULT 798
AAQ89896/C
ID AAQ89896 standard; DNA; 22 BP.
XX
AC AAQ89896;
XX
DT 03-JAN-1996 (first entry)
XX
XX Cystic fibrosis chromosome 7 mutant region, G 542X PCR primer.
DE Cystic fibrosis transmembrane conductance regulator; CFTR;
XX
KM mutational analysis; deletion; genetic abnormality; detection; ss.
XX
OS Synthetic.
XX
XX WO511990-A1.
PN
XX 04-MAY-1995.
PD
XX
XX 27-OCT-1994; 94WO-EP003538.
PF
XX
XX 29-OCT-1993; 93US-00145908.
PR
XX
XX (RAGG-) RAGGIO-ITALGENE SPA.
PA
XX Martinazzo G, Bichi R, Marcolini S, Turchetti E, Pelliccia A;
PI
XX WPI; 1995-178882/23.
DR
XX
XX Detection of genetic mutation(s) - using one probe to one side of the
PT mutation and second and third probes spanning the mutation.
XX
XX Example 1; Page 19; 30pp; English.
PS
XX AAQ89895 and AAQ89896 are a pair of PCR primers used in the detection of
CC the cystic fibrosis mutant region G 542X, using a novel method of
CC detection. The G 542X mutation features a G to T mutation at nucleotide
CC position 1756 in exon 11 of the CFTR gene. The method is useful in
CC detecting genetic mutations or abnormalities such as point mutations and
CC deletions and is therefore useful in the diagnosis of genetic and
CC particularly inheritable genetic diseases

XX
SQ Sequence 22 BP; 10 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 22;
Best Local Similarity 94.1%; Pred. No. 8.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4876 TTTCCTTCTCTGCAAC 4892
DB 21 TGCTTCTCTGCAAC 5

RESULT 799
AAT78996/C
ID AAT78996 standard; DNA; 22 BP.
XX
XX AAT78996;
AC
XX
XX 13-JAN-1998 (first entry)
DT
XX
XX Human Huntington's disease gene intron 1 3' acceptor site.
DE
XX
XX Huntington's disease; animal model; transgenic animal; human; therapy;
KM drug screening; Hdh gene; ss.
XX
XX Homo sapiens.
OS
XX
XX CA2178022-A.
PN
XX
XX 02-DEC-1996.
PD
XX
XX 03-JUN-1996; 96CA-02178022.
PF
XX
XX 01-JUN-1995; 95US-00457273.
PR
XX
XX (UYBR-) UNITV BRITISH COLUMBIA.
PA
XX
XX Hayden M, Lin B, Nasir J;
PI
XX
XX WPI; 1997-298677/28.
DR
XX
XX Mouse Huntington's Disease gene - useful for generating transgenic mice
PT as a model of Huntington's Disease.
XX
XX
XX Disclosure; Page 60; 69pp; English.
PS
XX
XX This oligonucleotide comprises the 5' acceptor site of intron 1 of the
CC human Huntington's disease (HD) gene. The splice site sequences for the
CC first 5 exons of the mouse HD gene (see AAT78974) and the human HD gene
CC were compared (see AAT78985-T79002). Targeted disruption of the murine HD
CC gene, e.g. at exon 5, can be used to examine the function of the HD gene
CC and its role in development. Transgenic mice can be used as models of HD
CC
XX
SQ Sequence 22 BP; 2 A; 3 C; 1 G; 16 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 22;
Best Local Similarity 94.1%; Pred. No. 8.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5395 AAAAATACAAAAGAA 5411
DB 20 AAAAATACAAAAGAA 4

RESULT 800
AAA96617
ID AAA96617 standard; DNA; 22 BP.
XX
XX AAA96617;
AC
XX
XX 08-FEB-2001 (first entry)
DT
XX
XX Primer used in mismatch extension of DNA in LDR reactions.
DE
XX
XX Coupled polymerase chain reaction; PCR; ligase detection reaction; LDR;
KM restriction endonuclease digestion; RFL, infectious disease; cancer;
XX waste water purification; primer; ss.
OS
XX
XX Unidentified.
PN
XX WO200056929-A2.
XX
XX 28-SEP-2000.

```

XX 17-MAR-2000; 2000MO-US007133.
PF
XX
PR 19-MAR-1999; 99US-0125251P.
XX
PA (CORR ) CORNELL RES FOUND INC.
PA (LOU ) UNIV LOUISIANA STATE.
PA (PURD ) PURDUE RES FOUND.
XX
PI Barany F, Day JP, Hammer RP, Bergstrom DE;
XX
DR WPI; 2000-638269/61.
XX
PT Coupled polymerase chain reaction-restriction endonuclease digestion-
PT ligase detection reaction to identify low abundance sequences differing
PT by single-base changes, insertion or deletion from high abundance
PT sequence in target sequences.
XX
PS Example 7; Fig 6C; 103pp; English.
XX
CC The specification describes the use of coupled polymerase chain reaction
CC (PCR), restriction endonuclease digestion (RSD) and ligase detection
CC reaction (LDR) to identify one or more low abundance sequences differing
CC by one or more single base changes, inserts or deletions, from a high
CC abundance sequence, in several target nucleotide sequences. The method
CC involves 3 PCR reaction phases, a RSD phase and an LDR phase. The method
CC is used to identify one or more low abundance sequences. The method is
CC also useful for detecting a wide variety of infectious diseases caused by
CC bacterial, viral, parasite and fungal infectious agent. Cancers can also
CC be detected by this method. The method is also used for detection,
CC identification and monitoring of pathogenic and indigenous municipal
CC waste water purification system and water reservoirs or in polluted areas
CC undergoing bioremediation and to detect plasmids containing genes that
CC can metabolise xenobiotics, to monitor specific target microorganisms in
CC population dynamic studies, or either to detect, identify, or monitor
CC specific target microorganisms modified microorganisms in the environment
CC and in industrial plants. The present sequence represents a primer used
CC in mismatch extension, in the course of the invention
XX
SQ Sequence 22 BP; 5 A; 9 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 22;
Best Local Similarity 94.1%; Pred. No. 8.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4737 GGAGACCCATCTCACC 4753
Db 1 GGAGGCCCATCTCACC 17

RESULT 801
AAL50570/c
ID AAL50570 standard; DNA; 22 BP.
XX
AC AAL50570;
XX
DT 12-DEC-2002 (first entry)
XX
DE Molecular array production method-related PCR primer.
XX
KM Molecular array; ss; target molecule identification; genetic analysis;
KM gene expression; SNP detection; haplotyping; sequencing; PCR; primer.
XX
OS Unidentified.
XX
PN WO200274988-A2.
XX
PD 26-SEP-2002.
XX
PF 18-MAR-2002; 2002MO-GB001245.
XX
PR 16-MAR-2001; 2001GB-00006635.
PR 02-AUG-2001; 2001GB-00018879.

```

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XX (YUCH-) UNIV CHANCELLOR MASTER & SCHOLARS OXF.
PA
XX Mir K;
XX
DR WPI; 2002-732872/79.
XX
XX Producing a molecular array with a plurality of molecules immobilized to
PT a solid substrate, useful in genetic analysis, gene expression studies or
PT the detection or typing of single nucleotide polymorphisms in a sample of
PT nucleic acids.
XX
PS Example 15; Page 122; 166pp; English.
XX
CC The invention comprises a method for producing a molecular array, the
CC method involves immobilising molecules to a solid phase at a density
CC which allows individual immobilised molecules to be individually
CC resolved. The molecular array produced by the method of the invention is
CC useful for identifying one or more target molecules in a sample. The
CC molecular array is also useful in genetic analysis, gene expression
CC studies, identifying molecules which interact with a target molecule,
CC detection/typing of single nucleotide polymorphisms, haplotyping and
CC sequencing. The present DNA sequence represents a PCR primer that was
CC used in an example of the invention
XX
SQ Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 8.8e+02;
Matches 17; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 5392 TAAAAAATGCANAAAGAAA 5412
Db 21 BAAAAAANAAAAAANAAAAA 1

RESULT 802
ACC48484/c
ID ACC48484 standard; DNA; 22 BP.
XX
AC ACC48484;
XX
DT 11-AUG-2003 (first entry)
XX
DE Locked nucleic acid anchored oligo(1) primer ON14.
XX
KM Locked nucleic acid; LNA; gene therapy; primer; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT 1..21
FT modified_base /tag= m
FT /mod_base= um
FT /note= "2'-O-methyluridine"
FT modified_base 1
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base 3
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base 5
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base 7
FT /tag= d
FT /mod_base= OTHER
FT /note= "OTHER= locked nucleic acid"
FT modified_base 9
FT /tag= e

```

FT	/mod_base= OTHER
PT	/note= "OTHER= locked nucleic acid"
FT	modified_base
FT	11
FT	/*tag= f
PT	/mod_base= OTHER
FT	/note= "OTHER= locked nucleic acid"
FT	13
FT	/*tag= g
CC	/mod_base= OTHER
FT	/note= "OTHER= locked nucleic acid"
FT	15
PT	/*tag= h
FT	/mod_base= OTHER
FT	/note= "OTHER= locked nucleic acid"
FT	17
PT	/*tag= i
FT	/mod_base= OTHER
FT	/note= "OTHER= locked nucleic acid"
FT	19
FT	/*tag= j
FT	/mod_base= OTHER
FT	/note= "OTHER= locked nucleic acid"
FT	21
FT	/*tag= k
FT	/mod_base= OTHER
FT	/note= "OTHER= locked nucleic acid"
FT	22
FT	/*tag= l
FT	/mod_base= OTHER
FT	/note= "OTHER= Compound 17d"
PN	W02003020739-A2.
XX	
PD	13-MAR-2003.
XX	
PF	04-SEP-2002; 2002WO-IB003911.
PR	
XX	
PR	04-SEP-2001; 2001US-0317034P.
PR	22-SEP-2001; 2001US-0323967P.
XX	
PA	(EXIQ-) EXIQON AS.
XX	
PI	Wengel J, Kauppinen S;
PI	
DR	WPI; 2003-363021/34.
XX	
PT	Novel nucleic acid comprising a locked nucleic acid unit having a
PT	modified base that comprises an optionally substituted carbocyclic aryl
PT	molety, or modified nucleobase or nucleosidic base other than
PT	oxazole/imidazole.
PS	
PS	Example 24a; Page 90; 119pp; English.
XX	
CC	The present sequence is that of pyrene-anchored locked nucleic acid (LNA)
CC	oligo(dT) primer ON14, which was used in first-strand cDNA synthesis from
CC	eukaryotic mRNA. It includes compound '17d' at its 3' end, which is based
CC	on an LNA-type 2'-O,4'-C-methylene-beta-D-ribofuranosyl moiety. It is
CC	one of a set of such primers (see also ACC48482-85) that were used in an
CC	example from the invention to demonstrate improved reverse transcription
CC	of mRNA using pyrene-LNA anchored oligo(T) primers. The following results
CC	were observed: efficient priming on mRNAs with short poly(A) tails;
CC	efficient anchoring of the oligo(T) primer by pyrene-LNA and LNA-C/G/T
CC	units resulting in an improved T20-VN anchor primer and thus avoiding
CC	reverse transcription of long poly(A) tracts; and improved reverse
CC	transcription of eukaryotic poly(A)+RNA directly from total RNA extracts
CC	due to increased specificity. The invention relates to modified LNA units
CC	that comprise unique base groups. Desirable nucleobase and nucleosidic
CC	base substitutions can mediate universal hybridisation when incorporated
CC	into nucleic acid strands. The novel LNA compounds can be used e.g. as
CC	PCR primers, in sequencing, the synthesis of antisense oligonucleotides,
CC	and in diagnostics
XQ	Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;
XX	

Query Match	0.3%	Score 15.4	DB 1	Length 22
Best Local Similarity	81.0%	Pred. No. 8.8e+02		
Matches 17	Conservative 1	Mismatches 3	Indels 0	Gaps 0
Qy	5392	TAATAAATAACAAAGAAA	5412	
Db	21	AAAAAAAAAAAAAAAAAAAA	1	
RESULT 803				
ACC48485/C				
ACC48485	standard; DNA; 22 BP.			
ACC48485;				
DT	11-AUG-2003	(first entry)		
DE	locked nucleic acid anchored oligo(1) primer ON15.			
XX	locked nucleic acid; LNA; gene therapy; primer; ss.			
OS	Synthetic.			
Key	Location/Qualifiers			
modified_base	21			
FT	/+tag= a			
FT	/mod_base= OTHER			
FT	/note= "OTHER= locked nucleic acid"			
modified_base	22			
FT	/+tag= b			
FT	/mod_base= OTHER			
FT	/note= "OTHER= Compound 17d"			
PN	W02003020739-A2.			
PD	13-MAR-2003.			
PP	04-SEP-2002; 2002WO-IB003911.			
PR	04-SEP-2001; 2001US-0317034P.			
PR	22-SEP-2001; 2001US-0323967P.			
PA	(EXIQ-) EXIQON AS.			
P1	Wengel J, Kauppinen S;			
XX	WPI; 2003-363021/34.			
DR				
XX				
PT	Novel nucleic acid comprising a locked nucleic acid unit having a			
PT	modified base that comprises an optionally substituted carboxylic aryl			
PT	moleity, or modified nucleobase or nucleosidic base other than			
PT	oxazole/imidazole.			
PS	Example 24a; Page 90; 119pp; English.			
XX				
CC	The present sequence is that of pyrene-anchored locked nucleic acid (LNA)			
CC	oligo(dT) primer ON15, which was used in first-strand cDNA synthesis from			
CC	eukaryotic mRNA. It includes compound '17d' at its 3' end, which is based			
CC	on an LNA-type 2'-O,4'-C-methylene-beta-D-ribofuranosyl moleity. It is			
CC	one of a set of such primers (see also ACC48482-84) that were used in an			
CC	example from the invention to demonstrate improved reverse transcription			
CC	of mRNA using pyrene-LNA anchored oligo(T) primers. The following results			
CC	were observed: efficient priming on mRNAs with short poly(A) tails;			
CC	efficient anchoring of the oligo(T) primer by pyrene-LNA and LNA-C/G/T			
CC	units resulting in an improved T20-VN anchor primer and thus avoiding			
CC	reverse transcription of long poly(A) tracts; and improved reverse			
CC	transcription of eukaryotic poly(A)+RNA directly from total RNA extracts			
CC	due to increased specificity. The invention relates to modified LNA units			
CC	that comprise unique base groups. Desirable nucleobase and nucleosidic			
CC	base substitutions can mediate universal hybridisation when incorporated			
CC	into nucleic acid strands. The novel LNA compounds can be used e.g. as			
CC	PCR primers, in sequencing, the synthesis of antisense oligonucleotides,			

CC	and in diagnostics
XX	
SO	Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;
	Query Match 0.3%; Score 15.4; DB 1; Length 22; Best Local Similarity 81.0%; Pred.No. 8.8e+02; Matches 17; Conservative 1; Mismatches 3; Indels 0; Gaps 0.
OY	5392 TAAATAATCAAAAAGAA 5412 : 21 BAAAAAAAAAAAAAAAAAAAAA 1
ID	RESULT 804 ACC48483/C ACC48483 standard; DNA; 22 BP. XX
AC	ACC48483;
XX	
DT	11-AUG-2003 (first entry)
XX	
DE	Locked nucleic acid anchored oligo(I) primer ON13.
XX	
KM	Locked nucleic acid; LNA; gene therapy; primer; ss.
XX	
OS	Synthetic.
XX	
FH	Key
FT	modified_base
FT	/tag= a
FT	/mod_base= OTHER
FT	/note= "OTHER= locked nucleic acid"
FT	5
FT	/tag= b
FT	/mod_base= OTHER
FT	/note= "OTHER= locked nucleic acid"
FT	8
FT	/tag= c
FT	/mod_base= OTHER
FT	/note= "OTHER= locked nucleic acid"
FT	11
FT	/tag= d
FT	/mod_base= OTHER
FT	/note= "OTHER= locked nucleic acid"
FT	14
FT	/tag= e
FT	/mod_base= OTHER
FT	/note= "OTHER= locked nucleic acid"
FT	17
FT	/tag= f
FT	/mod_base= OTHER
FT	/note= "OTHER= locked nucleic acid"
FT	21
FT	/tag= g
FT	/mod_base= OTHER
FT	/note= "OTHER= locked nucleic acid"
FT	22
FT	/tag= h
FT	/mod_base= OTHER
FT	/note= "OTHER= Compound 17d"
PN	WO2003020739-A2.
XX	
PD	13-MAR-2003.
XX	
PP	04-SEP-2002; 2002MO-IB003911.
XX	
PR	04-SEP-2001; 2001US-0317034P.
PR	22-SEP-2001; 2001US-0323967P.
XX	
PA	(EXIQ-) EXIQON AS.
XX	
P1	Wengel J, Kauppinen S,

```

XX WPI; 2003-363021/34.
XX
XX Novel nucleic acid comprising a locked nucleic acid unit having a
XX modified base that comprises an optionally substituted carbocyclic aryl
XX moiety, or modified nucleobase or nucleosidic base other than
XX oxazole/imidazole.
XX
XX Example 24a, Page 90; 119pp; English.
XX
XX The present sequence is that of pyrene-anchored locked nucleic acid (LNA)
XX oligo(dT) primer ON13, which was used in first-strand cDNA synthesis from
XX eukaryotic mRNA. It includes compound '17d' at its 3' end, which is based
XX on an LNA-type 2'-O,4'-C-methylene-beta-D-ribofuranosyl moiety. It is
XX one of a set of such primers (see also ACC4842-85) that were used in an
XX example from the invention to demonstrate improved reverse transcription
XX of mRNA using pyrene-LNA anchored oligo(T) primers. The following results
XX were observed: efficient priming on mRNAs with short poly(A) tails;
XX efficient anchoring of the oligo(T) primer by pyrene-LNA and LNA-C/G/T
XX units resulting in an improved 720-WN anchor primer and thus avoiding
XX reverse transcription of long poly(A) tracts; and improved reverse
XX transcription of eukaryotic poly(A)+RNA directly from total RNA extracts
XX due to increased specificity. The invention relates to modified LNA units
XX that comprise unique base groups. Desirable nucleobase and nucleosidic
XX base substitutions can mediate universal hybridisation when incorporated
XX into nucleic acid strands. The novel LNA compounds can be used e.g. as
XX PCR primers, in sequencing, the synthesis of antisense oligonucleotides,
XX and in diagnostics
XX
XX
XX Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;
XX
XX
XX Query Match 0.3%; Score 15.4; DB 1; Length 22;
XX Best Local Similarity 81.0%; Pred. No. 8.8e+02;
XX Matches 17; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
XX
XX
XX 5392 TAAAAAATCAAAAAGAA 5412
XX :||||| | ||||| |||
XX 21 BAAAAAHHAAAAAHHAAAA 1
XX
XX
XX RESULT 805
XX ABZ80983
XX ID ABZ80983 standard; DNA; 22 BP.
XX AC ABZ80983;
XX AA
XX DT 15-OCT-2003 (first entry)
XX
XX Mouse vitelliniform macular dystrophin 2-like protein 3 gene primer #2.
XX
XX Beetrophin; vitelliniform macular dystrophin 2; VMD2; ss; PCR; vaccine;
XX antiobesity; antidiabetic; immunomodulator; hypotensive; cardiant;
XX antilipemic; osteopathic; antiinflammatory; cytostatic; obesity; primer;
XX energy homeostasis; metabolism; triglyceride; body-weight regulation;
XX eating disorder; cachexia; diabetes mellitus; hypercensiom; galactose;
XX coronary heart disease; hypercholesterolemia; osteoarthritis; cancer;
XX sleep apnea.
XX
XX
XX Mus musculus.
XX
XX WO2003030922-A2.
XX
XX 17-APR-2003.
XX
XX 09-OCT-2002; 2002WO-BP011321.
XX
XX 09-OCT-2001; 2001BP-00124059.
XX
XX (DEVE-) DEVELOPEN ENTWICKLUNGSBIOLOGISCHE FORSCH.
XX
XX Steuernagel A, Broemner G, Fritsch R, Eulenberg K, Closssek T;
XX
XX WPI; 2003-393411/37.
XX

```

XX New pharmaceutical compositions comprising a Bestrophin gene, polypeptide
PT or nucleic acid, for treating, alleviating and/or preventing metabolic
PT diseases, e.g. obesity, cachexia, diabetes mellitus, hypertension, or
PT gallstones.
XX
XX Example 4; Page 49; 85pp; English.
PS
CC The invention relates to the isolation of members of the human
CC bestrophin gene family designated vitelliform macular dystrophin 2
CC (VMD2). The dystrophin gene family are involved in energy homeostasis and
CC metabolism of triglycerides. The sequence can be used for the manufacture
CC of an agent for detecting and/or verifying, for treating, alleviating
CC and/or preventing disorders including metabolic diseases such as obesity
CC and other body-weight regulation and related disorders such as eating
CC disorder, cachexia, diabetes mellitus, hypertension, coronary heart
CC disease, hypercholesterolemia, osteoarthritis, gallstones, cancers of the
CC reproductive organs, and sleep apnea. In an example of the invention, the
CC expression of the isolated genes was analysed using a comparable number
CC of genes from mice. This sequence represents a PCR primer used to amplify
CC the mouse VMD2-like protein 3 gene for the analysis
CC
SQ Sequence 22 BP; 5 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.4; DB 1; Length 22;
Best Local Similarity 94.1%; Pred. No. 8.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2954 AGGAGCTGAGCCTAAGT 2970
Db 1 AGGATCTGAGCCTAAGT 17
RESULT 806
AAD51324/C
ID AAD51324 standard; DNA; 22 BP.
XX
AC AAD51324;
XX
DT 16-APR-2003 (first entry)
XX
DE Anchored oligo dT primer used to illustrate the method of the invention.
XX
XX Laminitis; viral disease; vaccine; bacterial disease; primer; epistaxis;
XX Gastritis; gastric ulcer; respiratory ailment; fracture; joint disease;
XX musculoskeletal damage; ss.
OS
XX Unidentified.
XX
XX WO200290579-A1.
XX
PD 14-NOV-2002.
XX
PF 03-MAY-2002; 2002WO-AU000553.
XX
XX 04-MAY-2001; 2001AU-00004809.
XX
XX 29-JUN-2001; 2001US-00896941.
XX
XX (GENO-) GENOMICS RES PARTNERS PTY LTD.
XX
XX Brandon RB;
XX
XX WPI; 2003-120558/11.
XX
XX Assessing condition e.g. athletic ability, stage of disease, presence of
PT drugs, response to exercise, response to vaccines, therapies, nutritional
PT status, of performance animal involves analyzing nucleic acid expression.
XX
XX Disclosure; Page 46; 87pp; English.
XX
CC The invention relates to a method for assessing a condition of a
CC performance animal. The method involves determining in sample abundance
CC of expressed target nucleic acid, transmitting digital sample signal to

CC remote diagnostic server; processing digital sample signal at remotely
CC located database to correlate digital signal with digital information and
CC returning report of particular condition of animal. The method is useful
CC for assessing a condition of a performance animal preferably human, dog
CC or camel. The condition can be an athletic ability and a condition that
CC enhances, hinders, impedes or does not change an expected ability of the
CC performance animal; and also normal, pre-clinical, overt progress and/or
CC stage of disease, undiagnosed or unclassified conditions, presence of
CC drugs, response to exercise, response to vaccines, therapies, nutritional
CC status and response to environmental conditions. Diseases assessed by the
CC invention include laminitis, lameness, viral or bacterial disease,
CC gastritis, gastric ulcers, respiratory ailments, fractures, epistaxis,
CC musculoskeletal damage or disorders and joint diseases. The present
CC sequence is a primer used to illustrate the method of the invention
CC
SQ Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;
Query Match 0.3%; Score 15.4; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 8.8e+02;
Matches 17; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
QY 5392 TAAAAAATACAAAAGAAA 5412
Db 21 BAAAAAATACAAAAGAAA 1
RESULT 807
AAD64451/C
ID AAD64451 standard; DNA; 22 BP.
XX
AC AAD64451;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human RP-11-336A10 clone specific primer.
XX
XX Sequence presentation; human; chromosome 10; primer; ss.
XX
XX Homo sapiens.
XX
XX US2003190648-A1.
XX
PD 09-OCT-2003.
XX
XX 09-DEC-2002; 2002US-00314321.
XX
XX 05-APR-2002; 2002JP-00103333.
XX
XX (HITA) HITACHI LTD.
XX
XX Hosolri T, Yokoi T, Wagatsuma M;
XX
XX WPI; 2003-064174/80.
XX
DR 09-DEC-2002; 2002US-00314321.
XX
XX Presenting partial sequences by predicting and extracting exon sequences
PT from a database, is useful to prepare primers to obtain a cDNA clone of a
PT total coding region from a partial sequence of an unidentified gene
PT sequence.
XX
XX Example 4; SEQ ID NO 56; 0pp; English.
XX
XX The invention relates to methods and system for sequence presentation.
XX The method involves extracting a partial sequence corresponding to a
CC partial sequence of a target gene having an unidentified sequence, by
CC homology search on a database. The methods are useful for presentation of
CC sequences. It is also useful to prepare primer sequences of a gene having
CC a clone of a total coding region from a partial sequence of a gene having
CC an unidentified sequence. The present sequence is a primer specific for
CC human chromosome 10 RP-11-336A10 clone DNA. This sequence is used to
CC illustrate the method of the invention
CC
SQ Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 22;
 Best Local Similarity 81.0%; Pred. No. 8.8e+02;
 Matches 17; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 5392 TAAAAAAATACAAAAAGAAA 5412
 :|||||
 Db 21 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 808
 ADE95658/c
 ID ADE95658 standard; DNA; 22 BP.
 XX ADE95658;
 AC
 XX
 DT 12-FEB-2004 (first entry)
 XX
 XX Human NOVX protein-related PCR primer Ag5738 reverse.
 XX
 KM NOVX protein; biochemical stimulation; physiological stimulation;
 KM cardiant; antidiabetic; hypotensive; cytosolic; anorectic;
 KM antineuritic; antidiabetic; nephrotoxic; dermatological;
 KM immunosuppressive; anti-HIV; antiinflammatory; neuroprotective;
 KM neurotoxic; antiparasitic; antiparkinsonian; antidiabetic; neuroleptic;
 KM antidepressant; antiallergic; gynaecological; gene therapy; vaccine;
 KM NOVX-associated disorder; cardiomyopathy; atherosclerosis; hypertension;
 KM cancer; obesity; rheumatoid arthritis; diabetes; glomerulonephritis;
 KM psoriasis; skin disorder; AIDS; inflammation; multiple sclerosis;
 KM Alzheimer's disease; Parkinson's disease; asthma; schizophrenia;
 KM depression; allergy; fertility disorder; PCR; primer; ss; Ag5738 reverse.
 XX
 OS Homo sapiens.
 XX
 PN WO2003050245-A2.
 PD 19-JUN-2003.
 XX
 PF 03-DEC-2002; 2002WO-US038594.
 XX
 XX 05-DEC-2001; 2001US-033660P.
 PR 07-DEC-2001; 2001US-033828P.
 PR 12-DEC-2001; 2001US-034134P.
 PR 17-DEC-2001; 2001US-034147P.
 PR 17-DEC-2001; 2001US-034154P.
 PR 20-DEC-2001; 2001US-034258P.
 PR 27-DEC-2001; 2001US-034429P.
 PR 31-DEC-2001; 2001US-034490P.
 PR 17-APR-2002; 2002US-037328P.
 PR 15-MAY-2002; 2002US-0380981P.
 PR 17-MAY-2002; 2002US-038145P.
 PR 28-MAY-2002; 2002US-0383534P.
 PR 28-MAY-2002; 2002US-0383744P.
 PR 29-MAY-2002; 2002US-0383829P.
 PR 29-MAY-2002; 2002US-0384024P.
 PR 07-AUG-2002; 2002US-0401788P.
 PR 26-AUG-2002; 2002US-0406353P.
 PR 31-OCT-2002; 2002US-00401788.
 PR 02-DEC-2002; 2002US-00406353.
 XX
 XX (CURA-) CURAGEN CORP.
 PA
 XX
 PI Alsbrook JP, Anderson DW, Boldog FL, Burgess CE, Chilikuru RA,
 PI Binger SR, Gerlach VL, Gorman L, Gould-Rothberg BE, Guo X,
 PI Jeffers ME, Ji W, Li L, Malysankar UM, Miller CE, Murphy R,
 PI Paturajan M, Peyman JA, Rastelli L, Rieger DK, Shenoy SG,
 PI Sulten G, Starling G, Taupier RJ, Voss EZ, Zhong H, Zhong M,
 XX
 XX WPI; 2003-513974/48.
 DR
 XX
 XX New NOVX polypeptides and nucleic acids, useful for preventing or
 PT treating NOVX-associated disorders, e.g. cancer, cardiomyopathy,
 PT atherosclerosis or diabetes, and in chromosome mapping, tissue typing or
 PT pharmacogenomics.

XX
 PS Example B; SEQ ID NO 190; 211pp; English.
 XX
 CC This invention relates to novel NOVX proteins, and the DNA sequence which
 CC encode them, having properties related to stimulation of biochemical or
 CC physiological responses in a cell, a tissue, an organ or an organism.
 CC Compounds which modulate the proteins of the invention may have cardiant,
 CC antidiabetic, hypotensive, cytosolic, anorectic, antirheumatic,
 CC antineuritic, antidiabetic, nephrotoxic, dermatological,
 CC immunosuppressive, anti-HIV, antiinflammatory, neuroprotective,
 CC neurotoxic, antiparasitic, antiparkinsonian, antidiabetic, neuroleptic,
 CC antidepressant, antiallergic or gynaecological activities. The DNA
 CC sequences of the invention may be useful for gene therapy whilst the
 CC protein sequences may allow the development of a vaccine. The protein is
 CC useful in the manufacture of a medicament for treating a syndrome
 CC associated with a human disease. The invention may be useful in
 CC diagnosing, treating or preventing NOVX-associated disorders, for example
 CC cardiomyopathy, atherosclerosis, hypertension, cancer, obesity, skin
 CC rheumatoid arthritis, diabetes, glomerulonephritis, psoriasis, AIDS,
 CC Parkinson's disease, inflammation, multiple sclerosis, Alzheimer's disease,
 CC fertility disorders. The nucleic acids may further be used as
 CC hybridisation probes, in chromosome mapping, tissue typing, preventive
 CC medicine, and pharmacogenomics. The present sequence is that of PCR
 CC primer Ag5738 reverse which was used for the amplification of a human
 CC gene sequence during the analysis of gene expression in the
 CC exemplification of the invention.
 XX
 SQ Sequence 22 BP; 3 A; 6 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 22;
 Best Local Similarity 94.1%; Pred. No. 8.8e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2942 CCAGAACTGAAAGAG 2958
 :|||||
 Db 20 CCAGAAACATGAAAGAG 4

RESULT 809
 ADF88323
 ID ADF88323 standard; DNA; 22 BP.
 XX
 XX ADF88323;
 AC
 XX
 DT 26-FEB-2004 (first entry)
 XX
 XX Single nucleotide polymorphism detection primer, SEQ ID NO 1906.
 DE
 XX human; single nucleotide polymorphism; microarray; side effect; ss;
 KM primer; PCR.
 XX
 XX Synthetic.
 OS
 OS Homo sapiens.
 XX
 PN JP2003235571-A.
 XX
 PD 26-AUG-2003.
 XX
 PF 12-FEB-2002; 2002JP-00034717.
 XX
 PR 12-FEB-2002; 2002JP-00034717.
 XX
 PA (KAGA-) KAGAKU GIUTTSU SHINKO JIGYODAN.
 XX
 XX WPI; 2003-820454/77.
 DR
 XX
 XX Novel polynucleotide useful for detecting single nucleotide polymorphisms
 PT in human gene.
 PT
 XX
 XX Claim 2; SEQ ID NO 1906; 704pp; Japanese.
 PS
 XX The invention relates to a novel polynucleotide isolated and purified

CC from a human gene having any one of 935 fully defined sequences as given
 CC in specification, or a sequence having a base substitution. The invention
 CC further relates to: an oligonucleotide containing single nucleotide
 CC polymorphisms; a PCR primer set chosen from the combination of two DNA
 CC fragments from any one of 1220 fully defined sequences as given in
 CC specification; a labelling probe containing the SNP containing oligo; and
 CC a microarray equipped with the SNP containing oligo. The isolated human
 CC gene of the invention is useful for detecting the single nucleotide
 CC polymorphisms in human gene. The isolated human gene is also useful for
 CC diagnosis of disease and determination of side effect to a medical agent.
 CC The isolated human gene is also effective in detecting single nucleotide
 CC polymorphisms in a human gene. This polynucleotide sequence represents
 CC one of the PCR primers used in the single nucleotide polymorphism
 CC detection method of the invention.

Sequence 22 BP; 5 A; 8 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 22;
 Best Local Similarity 94.1%; Pred. No. 8.8e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1355 TCACAGAGCTGCTACTT 1371
 |||||
 Db 2 TCACAGAGCTGCTACTT 18

RESULT 810
 ABX74887/c
 ID ABX74887 standard; DNA; 22 BP.

AC ABX74887;

DT 21-MAR-2003 (first entry)

XX Oligo-dT primer used in human CC-RCC invention.

DE Microarray; solid surface; immobilised probe; CC-RCC;

KW differential expression profile; aggressive CC-RCC tumour type;

KW non-aggressive CC-RCC tumour type; clear cell renal carcinoma;

KW gene expression profiling; tumour tissue; oligo-dT; primer; ss.

OS Synthetic.

PN WO200279411-A2.

PD 10-OCT-2002.

PF 29-MAR-2002; 2002WO-US009576.

PR 29-MAR-2001; 2001US-0279411P.

PA (VAND-) VAN ANDEL INST.

PI Haab B, Rhodes D, Teh BT, Takashi M;

DR WPI; 2003-040679/03.

XX New microarray, comprising a matrix of cDNA probe from a set of probes
 PT immobilized to a solid surface in predetermined order, useful in the
 PT prognosis of patients with clear cell renal carcinoma.

XX Example 2; Page 30; 179pp; English.

CC The present invention relates to a microarray comprising a matrix of at
 CC least one cDNA probe from a set of probes immobilised to a solid surface
 CC in a predetermined order, where a row of pixels corresponds to replicates
 CC of one distinct probe from the set. The probes are complementary to
 CC nucleic acid sequences that are expressed differentially in aggressive as
 CC compared to non-aggressive types of clear cell renal carcinoma (CC-RCC)

CC and that hybridise to the probes under high stringency conditions. The
 CC microarray is useful for the prognosis of patients with CC-RCC, wherein
 CC aggressive and non-aggressive CC-RCC tumour types are characterised by
 CC differential expression profiles of genes that hybridise with one or more

CC probes immobilised on the microarray. The arrays are useful for gene
 CC expression profiling of tumour and normal tissues. The present sequence
 CC represents an oligo-dT primer used in the examples of the present
 CC invention

Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 22;
 Best Local Similarity 81.0%; Pred. No. 8.8e+02;
 Matches 17; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 5392 TAAAAAATACCAAAAAA 5412
 :|||
 Db 21 BAAAAA 1

RESULT 811
 ADI34007/c
 ID ADI34007 standard; DNA; 22 BP.

AC ADI34007;

DT 22-APR-2004 (first entry)

XX RNA extraction anchored oligonucleotide primer.

XX ss; cancer; neuroblastoma; rhabdomyosarcoma; Burkitt's tumour family;

KW Ewing tumour family; primer.

OS Synthetic.

PN US2004009154-A1.

PD 15-JAN-2004.

PF 31-MAY-2002; 2002US-00159563.

PR 25-APR-2002; 2002US-00133937.

PA (KHAN/) KHAN J.

PA (RING/) RINGNER M.

PA (PETE/) PETERSON C.

PA (MELT/) MELTZER P.

PI Khan J, Ringner M, Peterson C, Meltzer P;

DR WPI; 2004-167702/16.

XX Selecting genes expressed in cancer cell, by characterizing cancer based
 PT on functioning of gene selection by comparing expression of selected gene
 PT from cancer cell with expression of selected genes from noncancerous
 PT cell.

XX Example 2; Page 18; 53pp; English.

XX The invention relates to a method of selecting genes expressed in a
 CC cancer cell, which involves characterising cancer based on the
 CC functioning of gene selection by comparing the expression of the selected
 CC gene from the cancer cell with the expression of an identical selection

CC of genes from a noncancerous cell or different type of cancer cell. The
 CC method is useful for selecting genes expressed in a cancer cell. The
 CC method is useful for targeting the therapy of cancer by using a selection
 CC of genes or their products expressed in a cancer cell, the gene selection
 CC or a selection of product functioning to characterising cancer by
 CC comparing the expression of the selected gene or their products from the
 CC cancer cell with the expression of an identical selection of genes or
 CC their products noncancerous. The method is also useful for diagnosing,
 CC prognosing, monitoring and classifying a disease condition e.g. cancer
 CC such as neuroblastoma, rhabdomyosarcoma, Burkitt's or Ewing family of
 CC tumours. The present sequence represents an anchored oligonucleotide
 CC primer used to extract RNA from cells.

Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 22;
 Best Local Similarity 91.0%; Pred. No. 8.8e+02;
 Matches 17; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 5392 TAAAAAATACAAAAAGAA 5412
 :|||||:|||||:
 Db 21 BAAAAAAAAAAAAAAAAAAAA 1

RESULT 812
 ADK69815/c
 ID ADK69815 standard; DNA; 22 BP.
 XX
 XX ADK69815;
 XX
 XX 06-MAY-2004 (first entry)
 XX
 XX PCR primer to amplify human glucosyl-transfer agent related DNA SeqID 12.
 DE
 XX PCR, primer; human; glucosyl-transfer agent; chondroitin;
 KW chondroitin-sulphate proteoglycan; N-acetyl galactosamine;
 KW D-glucuronic acid; canceration; CSGalNAc-T; ss.
 XX
 XX Homo sapiens.
 OS
 XX JP2004024208-A.
 PN
 XX 29-JAN-2004.
 PD
 XX 12-JUL-2002; 2002JP-00204924.
 PF
 XX 30-APR-2002; 2002JP-00129156.
 PR
 XX (DOKU-) DOKURITSU GYOSEI HOJIN SANGYO GIUTSU SO.
 PA (SEK) SEIKAGAKU KOGYO CO LTD.
 XX
 XX WPI; 2004-127108/13.
 DR
 XX Novel glucosyl-transferase transferring N-acetyl-D-galactosamine residue
 PT with respect to linkage tetrasaccharide existing in binding site of sugar
 PT chain, useful for synthesizing chondroitin/chondroitin-sulfate
 PT proteoglycan.
 XX
 XX Example 1; SEQ ID NO 12; 38bp; Japanese.
 PS
 XX This invention relates to a novel glucosyl-transfer agent. Specifically,
 CC it refers to the synthesis of chondroitin or chondroitin-sulphate
 CC proteoglycans using this glucosyl-transfer agent to transfer the N-acetyl
 CC galactosamine residue from a donor substrate to D-glucuronic acid existing
 CC in the non-reducing terminal of an N-acetyl-D-galactosamine receptor
 CC substrate containing a formulaic sugar chain. The present invention
 CC describes a detection method for the canceration of tissue associated
 CC with the glucosyl-transfer agent as CSGalNAc-T. This oligonucleotide
 CC sequence is a PCR primer given in an exemplification of the invention.
 CC
 XX
 SO Sequence 22 BP; 2 A; 9 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.4; DB 1; Length 22;
 Best Local Similarity 94.1%; Pred. No. 8.8e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 574 AAGGAGGAGCTGAAGCA 590
 :|||||:|||||:
 Db 17 AAGGAGGAGCTGACGCA 1

RESULT 813
 ADU45826
 ID ADU45826 standard; DNA; 22 BP.
 XX
 XX ADU45826;
 AC
 XX

DT 06-MAY-2004 (first entry)
 XX
 XX Human fibrosis/scarring predisposition-related PCR primer SeqID25.
 DE
 XX In vitro diagnosis; inappropriate fibrosis; scarring; 16SNA region;
 KW ND2 gene; NADH-guione oxidoreductase; complex I; cytochrome b;
 KW complex III region; COI gene; Cytochrome c oxidase; complex IV region;
 KW mitochondrial genome; antiinflammatory; vulnery; dermatological;
 KW nephrotic; gene therapy; Dupuytren's disease; keloid; hypertrophic scar;
 KW scleroderma; systemic sclerosis; crest syndrome; tubercous scleriosis;
 KW skin patch; familial cutaneous collagenoma; skin metabolic disorders;
 KW eosinophilic fascitis; discoid lupus erythematosus; dermatomyositis;
 KW mixed connective tissue disease; drug-induced skin fibrosis;
 KW oral submucous fibrosis; pulmonary; cardiac fibrosis; liver fibrosis;
 KW cirrhosis; renal fibrosis; drug induced fibrosis;
 KW central nervous system fibrosis; peripheral nervous system fibrosis;
 KW vascular system fibrosis; genitourinary tract fibrosis;
 KW gynaecological fibrosis; glomerulonephritis; cystic fibrosis;
 KW scleroderma; myocardial fibrosis; myocardial infarction; stroke;
 KW neurodegenerative disorder; human; PCR; primer; ss.
 XX
 XX Homo sapiens.
 OS
 XX WO2003093506-A2.
 PN
 XX 13-NOV-2003.
 PD
 XX 23-APR-2003; 2003WO-GB001717.
 PF
 XX 30-APR-2002; 2002GB-00009812.
 PR
 XX (RENO-) RENOVO LTD.
 PA
 XX Ferguson MWJ, Ollier WR, Bayat A;
 XX
 XX WPI; 2004-022664/02.
 DR
 XX In vitro diagnosing a condition due to inappropriate fibrosis or
 PT scarring, e.g. Dupuytren's disease by detecting polymorphism or mutation
 PT in the 16SNA region, ND2 gene, cytochrome b region or COI gene of the
 PT mitochondrial genome.
 XX
 XX Example 1; SEQ ID NO 25; 81bp; English.
 PS
 XX This invention relates to a novel method of in vitro diagnosis or
 CC detection of a predisposition to a condition characterised by
 CC inappropriate fibrosis or scarring comprising examining the 16SNA
 CC region, ND2 gene of NADH-guione oxidoreductase (complex I), cytochrome b
 CC (complex III) region or COI gene of Cytochrome c oxidase (complex IV)
 CC region of the mitochondrial genome to detect the presence of a genetic
 CC polymorphism or mutation linked to the development of the condition. The
 CC invention may be useful for the development of compositions with an
 CC antiinflammatory, vulnery, dermatological or nephrotic activity. In
 CC addition, the sequences disclosed may prove useful for gene therapy. The
 CC method, kit or delivery may be useful for diagnosing or detecting or
 CC treating a predisposition to a condition characterised by inappropriate
 CC fibrosis or scarring. A modulator of mitochondrial genome gene products
 CC is useful in the manufacture of medicament for treating a condition
 CC characterised by fibrosis or scarring. The condition is Dupuytren's
 CC disease, keloid or hypertrophic scar, scleroderma, systemic sclerosis,
 CC crest syndrome, tubercous scleriosis with skin patches, familial cutaneous
 CC collagenoma, metabolic disorders of the skin, eosinophilic fascitis,
 CC discoid lupus erythematosus, dermatomyositis, mixed connective tissue
 CC disease, drug-induced skin fibrosis, oral submucous fibrosis, fibrosis
 CC induced following dietary and environmental exposures, pulmonary/cardiac
 CC fibrosis, liver fibrosis/cirrhosis, renal fibrosis, drug induced
 CC fibrosis, central and peripheral nervous system fibrosis, vascular system
 CC fibrosis, male and female genitourinary tract fibrosis, glomerulonephritis, cystic fibrosis, scleroderma, myocardial
 CC fibrosis, fibrosis following myocardial infarction and central nervous
 CC system fibrosis following a stroke or neurodegenerative disorders. The
 CC present sequence is that of a PCR primer which was used for amplification
 CC of a region of the human mitochondrial genome in the exemplification of

```
CC the invention.
XX
SQ Sequence 22 BP; 5 A; 11 C; 1 G; 5 T; 0 U; 0 Other;

Query Match      0.3%; Score 15.4; DB 1; Length 22;
Best Local Similarity 94.1%; Pred. No. 8.8e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      340 TTCTACCACTCCCT 356
      |||||
Db      3 TTCTACCACTGACCT 19

RESULT 814
ADL97794/c
ID ADL97794 standard; DNA; 22 BP.
XX
AC ADL97794;
XX
DT 17-JUN-2004 (first entry)
XX
DE Oligonucleotide probe.
XX
KM ss; primer; molecular array.
XX
OS unidentified.
XX
PN WO2004027093-A1.
XX
PD 01-APR-2004.
XX
PF 19-SEP-2003; 2003WO-GB004041.
XX
PR 19-SEP-2002; 2002GB-00021792.
PR 26-SEP-2002; 2002GB-00022412.
XX
PA (UYCH-) UNIV CHANCELLOR MASTER & SCHOLARS OXF.
PI M1r K;
XX
DR WPI; 2004-295431/27.
XX
PT Producing molecular array by immobilizing to solid phase several known
PT molecules at low density for allowing individual immobilized molecules to
PT be individually resolved and spatially addressable.
XX
PS Disclosure; Page 152; 21pp; English.
XX
CC The invention relates to a method of producing (M1) a molecular array,
CC involves: immobilizing to a solid phase a several molecules at a density
CC which allows individual immobilized molecules to be individually
CC resolved, where each molecule in the array is spatially addressable and
CC the identity of each molecule is known or determined prior to
CC immobilization; and optionally providing a molecular array comprising a
CC several molecules immobilized to a solid phase at a density such that
CC individual immobilized molecules are not capable of being individual
CC resolved, and reducing the density of functional immobilized molecules in
CC the array such that remaining individual functional immobilized molecules
CC are capable of being individually resolved, where each individual
CC functional molecule in the resulting array is spatially addressable and
CC the identity of each molecule is known or determined prior to the density
CC reduction step. The array efficiently resolve complex samples, separate
CC correct signals from erroneous signals, eliminates need for sample
CC amplification, detects transient interactions or temporal characteristic
CC of single molecule processes. This sequence represents an oligonucleotide
CC used in the method of the invention.
XX
SQ Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;

Query Match      0.3%; Score 15.4; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 8.8e+02;
Matches 17; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
```

```
QY      5392 TAAAAAATACAAAAAGAAA 5412
      :|||
Db      21 BAAAAAAAAAAAAAAAAAAAA 1

RESULT 815
AAQ11215
ID AAQ11215 standard; DNA; 20 BP.
XX
AC AAQ11215;
XX
DT 11-JUN-1991 (first entry)
XX
DE Oligonucleotide used in detection of Bacillus cereus.
XX
KM Beta lactamase; PCR; ss.
XX
OS Synthetic.
XX
PN JP03049696-A.
XX
PD 04-MAR-1991.
XX
PR 18-JUL-1989; 89JP-00185681.
XX
PR 18-JUL-1989; 89JP-00185681.
XX
PA (SHMA ) SHIMADZU CORP.
XX
DR WPI; 1991-106868/15.
XX
PT Oligo-nucleotide for detecting Bacillus cereus in specimen - has sequence
PT complementary to sequence coding for B cereus beta-lactamase gene.
XX
PS Claim 1; Page 1; 6pp; Japanese.
XX
CC This oligonucleotide is used as a primer for a polymerase chain reaction
CC (PCR), in conjunction with other primers (see AAQ11212-14 and AAQ11216),
CC to selectively amplify a target sequence prior to its detection by
CC electrophoresis or chromatography. It has a sequence complementary to a
CC portion of the B.cereus beta-lactamase gene. It is useful in the
CC detection of Bacillus cereus bacteria in samples, e.g. urine or food. See
CC also J0349697, -98 and -99
XX
SQ Sequence 20 BP; 1 A; 7 C; 3 G; 9 T; 0 U; 0 Other;

Query Match      0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY      64 TTCTGAAGCCCATTCCTG 83
      |||||
Db      1 TTCTGATGCCCTTCCCTG 20

RESULT 816
AAQ10290
ID AAQ10290 standard; DNA; 20 BP.
XX
AC AAQ10290;
XX
DT 05-APR-1991 (first entry)
XX
DE Probe to beta-lactamase gene of Bacillus cereus.
XX
KM Polymerase chain reaction; PCR; food poisoning; ss.
XX
OS Synthetic.
XX
PN BP409159-A.
XX
PD 23-JAN-1991.
XX
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PF 17-JUL-1990; 90BP-00113661.
XX
XX 18-JUL-1989; 89BP-00185683.
PR 18-JUL-1989; 89BP-00185685.
PR 27-SEP-1989; 89BP-00251400.
XX
PA (SHMA ) SHIMADZU CORP.
PI Ohashi T, Jikuya H, Takano J, Shirasaki Y, Abe H, Yamagata K;
PI Aoyama Y, Tada J;
XX
XX WPI; 1991-023778/04.
XX
PT Detection of bacterial species causing food poisoning - using polymerase
PT chain reaction to amplify specific gene fragments.
XX
XX Claim 3; Page 53; 56pp; English.
XX
XX Probes may be used to identify food poisoning agents such as B.cereus by
CC using the polymerase chain reaction
CC
XX
XX Sequence 20 BP; 1 A; 7 C; 3 G; 9 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 64 TTCTGAAAGCCCATTCCTG 83
Db 1 TTCTGTAATGCCCTTCCCTG 20
XX
XX RESULT 817
XX AAQ25565/c
XX AAQ25565 standard; DNA; 20 BP.
XX
XX AAQ25565;
XX
XX 25-MAR-2003 (revised)
XX 02-DEC-1992 (first entry)
XX
XX Dye-coupled 3'-amino modified oligonucleotide.
XX
XX DNA synthesis; RNA; antisense strands; detection; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 20 /*tag= a
XX /note= "3-amino modified"
XX
XX BP490281-A1.
XX
XX 17-JUN-1992.
XX
XX 06-DEC-1991; 91BP-00120935.
XX
XX 11-DEC-1990; 90DB-04039488.
XX
XX (PARH ) HOECHST AG.
XX
XX Engels J, Herrlein M, Konrad R, Mag M;
XX
XX WPI; 1992-201578/25.
XX
XX New dye-coupled modified nucleosides, nucleotides and oligonucleotides -
XX useful for synthesis of antisense DNA and RNA strands in presence of
XX template, also for in-vivo and in-vitro detection of genetic material.
XX
XX Example; Page 9; 17pp; German.
XX
XX The sequence is an example of a dye coupled 3'-amino modified oligo-

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CC nucleotide, it can be used in the synthesis of DNA and RNA nucleosides,
CC nucleotides and oligonucleotides and for the synthesis of opposite
CC strands in the presence of a template strand and in fluorescence
CC microscopic and macroscopic detection in vivo and in vitro of genetic
CC material. It is labelled with a fluorescent dye. See also AAQ25566 and
CC AAQ25567. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAATACAAAAGAA 5412
Db 20 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 818
XX AAQ33554/c
XX AAQ33554 standard; DNA; 20 BP.
XX
XX AAQ33554;
XX
XX 25-MAR-2003 (revised)
XX 02-FEB-1993 (first entry)
XX
XX Microsatellite sequence from clone AGLA247.
XX
XX PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
XX genetic mapping; traits; amplification; ss.
XX
XX Bos taurus.
XX
XX WO9213102-A1.
XX
XX 06-AUG-1992.
XX
XX 15-JAN-1992; 92MO-US000340.
XX
XX 15-JAN-1991; 91US-00642342.
XX
XX (GENM-) GENMARK.
XX
XX Georges M, Maesey JM;
XX
XX WPI; 1992-284684/34.
XX
XX Polymorphic bovine DNA markers - used in genetic identification, gene
XX mapping, and selective breeding.
XX
XX Table 7; Page 150; 517pp; English.
XX
XX The sequence is that of a bovine microsatellite sequence obt'd. by
XX screening a library of bovine MboI DNA fragments of between 250 and 500
XX bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50
XX clones cross-hybridised. Assuming independent distribution of
XX microsatellites and MboI sites, the frequency of (T6)n >9 microsatellites
XX in the bovine genome is estimated at >100, 000. The sequence information
XX for ca. 230 such bovine microsatellites is summarised in the
XX specification and indexed herein (see below). The sequences upstream and
XX downstream of the microsatellite sequence were used to generate the
XX required PCR primers for in vitro amplification of the corresp.
XX microsatellite (using the program OPTIPRIM). The microsatellites may be
XX used to identify individuals, for parentage testing, and in the genetic
XX mapping of economic trait loci, or genes involved in the determination of
XX economically important traits esp. in cattle, to allow selective
XX breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN
XX field.)
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 15.2; DB 1; Length 20;

```



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XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENBSEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily.
XX
SQ Sequence 20 BP; 1 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5389 AATTAAAAAAATACAAAAA 5408
DB 20 AATAAAAAATAAAAA 1

RESULT 822
AAQ75568/c
ID AAQ75568 standard; DNA; 20 BP.
XX
XX AAQ75568;
XX
DT 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; 88.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENBSEQ files AAQ75547-Q75798)

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CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily.
XX
SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5400 TACAAAAAGAAAAATGAA 5419
DB 20 TACAAAAAATAAAAA 1

RESULT 823
AAQ90405/c
ID AAQ90405 standard; DNA; 20 BP.
XX
XX AAQ90405;
XX
DT 08-JAN-1996 (first entry)
XX
XX T2 (synthetic DNA probe with 5' amino terminal #4).
XX
XX T2; HLA; dQa; self-addressable electronic device; SAEI; hybridisation;
XX 88.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX misc_feature 1
XX FT /tag= a
XX FT /note= "3' aminolink2 Thymine; allows binding to any
XX FT amine"
XX
XX W09512808-A1.
XX
XX 11-MAY-1995.
XX
XX 26-OCT-1994; 94WO-US012270.
XX
XX 01-NOV-1993; 93US-00146504.
XX
XX (NANO-) NANOGEN INC.
XX
XX Heller MJ, Tu B;
XX
XX WPI; 1995-185870/24.
XX
XX New self-addressable electronic devices - used for multi-step and
XX multiplex reactions such as DNA hybridisation(s), clinical diagnostics
XX and bio-polymer synthesis.
XX
XX Example 1; Page 41; 86pp; English.
XX
XX The sequences represented by, AAQ90402-15 are synthetic DNA probes
XX containing 5' amino termini. The sequences shown in AAQ90390-401 are
XX synthetic DNA probes with 3' ribonucleoside termini. These sequences were
XX specific for the polymorphisms of HLA gene dQa. The sequences were used
XX in the device of the invention. This is a self-addressable electronic
XX device (SAEI) that can be used to carry out multi-step and multiplex
XX reactions, such as nucleic acid hybridisations. The advantages of this
XX method are that these reactions can be carried out with complete and
XX precise electronic control, and that the rate, specificity and
XX sensitivity of these reactions are greatly improved at micro-locations
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;

```

	Matches	17;	Conservative	0;	Mismatches	3;	Indels	0;	Gaps	0;
CY	5393	AAAAAAAAATCACAAAAGGAA	5412							
Dc	20	AAAAAAAAAAAAAAAAAAAAA	1							
	RESULT_824									
ID	AAT3632/c									
XX	AAT3632 standard; cDNA; 20 BP.									
AC	AAT3632;									
DT	25-MAR-2003 (revised)									
DT	12-DEC-1996 (first entry)									
XX	Tumour marker p65 CDNA antisense primer.									
DE										
KW	Oncofeetal protein p65; tumour marker; breast cancer; prostate; cancer;									
KM	ovary cancer; diagnosis; prognosis; probe; primer; PCR;									
XX	polymerase chain reaction; ss.									
OS	Synthetic.									
XX										
PN	WO9629402-A1.									
PD	26-SEP-1996.									
PF	11-MAR-1996; 96WO-US002562.									
PR	17-MAR-1995; 95US-00405648.									
PA	(TEXAS) UNIV TEXAS SYSTEM.									
PI	Hanusekwalaszek M, Slaga TJ, Walaszek Z;									
DR	WPJ; 1996-443178/44.									
PT	New nucleic acid encoding the p65 oncofoetal protein and related									
Pt	hybridisation probes - for diagnosis of cancer, esp. where related to									
xx	steroid hormone expression, and for risk assessment.									
PS	Example 8; Page 25; 55pp; English.									
CC	A PCR primer (AAT3632) is based on rat oncofoetal protein p65 cDNA (see									
CC	also AAT3630). It was used as the antisense primer together with									
CC	5'AmpI/FINDER anchor primer (Clontech) to amplify cDNA from the human									
CC	brest cancer cell line MCF-7. A cDNA clone (AAT3631) coding for human									
CC	p65 was isolated. p65 is useful as a tumour marker (see also AMO4165).									
CC	(Updated on 25-MAR-2003 to correct Pl field.)									
Sequence	20 BP; 4 A; 6 C; 8 G; 2 T; 0 U; 0 Other;									
Query Match	0.3%; Score 15.2; DB 1; Length 20;									
Best Local Similarity	85.0%; Pred. No. 9.3e+02;									
Matches	17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;									
Qy	3119 CCCTGACCAGACTGGACCTG 3138									
Dc	20 CCCGTCTTCACTGACCTG 1									
	RESULT_825									
ID	AAV0752/c									
XX	AAV0752 standard; DNA; 20 BP.									
AC	AAV0752;									
XX										
DT	07-DEC-1998 (first entry)									
XX										
DE	phosphorothioate oligonucleotide.									
KW	phosphorothioate; sulphurisation; heterocycle; automated synthesis;									

KM	antisense; EDIT; Beaucage reagent; ss.	
XX	Synthetic.	
XX		
XX	Key	Location/Qualifiers
FT	misc_feature	1..20
FT		/*tag= a
FT		/note= "phosphorothioate internucleotide linkages"
XX		
XX	MO9741130-A2.	
PN		
PD	06-NOV-1997.	
XX		
PF	29-APR-1997;	97MO-US007118.
PR	30-APR-1996;	96US-00641920.
XX		
PA	(MINU) UNIV MINNESOTA.	
XX	(LOU) UNIV LOUISIANA STATE & AGRIC.	
PI	Barany G, Musier-Forsyth K, Xu Q, Chen L, Hammer RP,	
XX	WPI; 1997-549671/50.	
DR		
PT	Sulphurisation of phosphorus-containing compounds, e.g.	
PT	oligonucleotide(s) - by contacting the compound with a disulphide-	
PT	containing five-membered heterocycle.	
XX		
PS	Example 7; Page 30; 51pp; English.	
XX		
CC	The present invention provides a method for sulphurising phosphorus-	
CC	containing compounds. It comprises contacting the phosphorus-containing	
CC	compound which a 1,2,4-dithiazolidine-2,5-dione compound or a 3-	
CC	substituted-1,2,4-dithiazolin-5-one compound. The method is especially	
CC	useful for incorporation of phosphorothioate linkages into biologically	
CC	important molecules such as DNA, RNA and phosphopeptides. Molecules	
CC	containing such linkages are useful e.g. as antisense compounds for	
CC	inhibiting gene expression, as reagents for studying DNA-protein or RNA-	
CC	protein interactions, or as catalytic RNA. The present sequence	
CC	represents an oligonucleotide with phosphorothioate linkages prepared by	
CC	the method of the invention	
XX		
SQ	Sequence 20 BP; 1 A; 0 C; 0 G; 0 T; 19 U; 0 Other;	
XX		
Query Match	0.3%; Score 15.2; DB 1; Length 20;	
Best Local Similarity	85.0%; Pred. No. 9.3e+02;	
Matches 17; Conservative	0; Mismatches 3; Indels 0; Gaps 0;	
Oy	5392 TAAAAAATACAAAAAGAA 5411	
DB	20 TAAAAAAAAAAAAAAAAAA 1	
RESULT 826		
AAAT63649/C		
ID	AAAT63649 standard; DNA; 20 BP.	
XX		
XX	AAAT63649;	
AC		
XX		
XX	06-JUN-1997 (first entry)	
DE	Anti-HTLV antisense reference oligonucleotide HT.	
XX		
XX	antisense; complementary; tax gene; inhibit; HTLV-1;	
KW	human T-cell lymphotropic virus type 1; viral antigen expression; ss.	
XX		
OS	Synthetic.	
PN	JP09052898-A.	
XX		
XX	25-FEB-1997.	
PD		
XX	09-AUG-1995; 95JP-00224606.	
PF		


```

XX 09-AUG-1995; 95JP-00224606.
XX (SOVA-) SOYAKU GIUTSU KENKYUSHO KK.
XX WPI, 1997-197252/18.
XX Anti-HTLV-1 anti-sense oligo:nucleotide - is complementary to region of
XX tax gene from human T-cell lymphotropic virus type 1 and inhibits viral
XX antigen expression.
XX Example 1; Page 8; 10pp; Japanese.
XX Oligonucleotide having a partial sequence consisting of at least 15
XX bases of AAT63641 (an antisense oligo complementary to a region of the
XX tax gene which can inhibit human T-cell lymphotropic virus type 1 (HTLV-
XX 1) viral antigen expression) are claimed. In an example, six antisense
XX oligos were designed, T1-T6 (AAT63650-55) and were compared to six oligos
XX derived from other regions of HTLV-1, i.e. SUI (splice junction), P1
XX (p21), R1 (tax), RRI (tax response element), R1 (env) and G1 (gag), four
XX reference oligonucleotides T15 (tax-sense), HC (dC20), HT (dT20)
XX (AAT63647-49) and a random 20mer (RAN) in a HTLV-1 virus antigen
XX expression inhibiting test. Oligonucleotide T1 gave the best results
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAATACAAAAGAA 5412
Db 20 AAAAAAAAAAAAAAAAAA 1

RESULT 827
AAV34591
ID AAV34591 standard; DNA; 20 BP.
XX
XX AAV34591;
XX
XX 25-AUG-1998 (first entry)
XX
XX M. vaccae antigenic sequence hybridising oligo AD12.
XX
XX Mycobacterium vaccae; antigen; therapy; prevention; cytokine production;
XX M. avium; M. tuberculosis; immune response enhancer; cell proliferation;
XX mycobacteria infection; vaccine; cancer; ss.
XX
XX Synthetic.
XX Mycobacterium vaccae.
XX
XX WO9808542-A2.
XX
XX 05-MAR-1998.
XX
XX 28-AUG-1997; 97WO-NZ000105.
XX
XX 29-AUG-1996; 96US-00705347.
XX 12-JUN-1997; 97US-00873970.
XX
XX (GENE-) GENESIS RES & DEV CORP.
XX
XX Tan P, Hiyaama J, Visser E, Skinner MA, Scott LM, Prestidge RL;
XX WPI, 1998-216926/19.
XX
XX Mycobacterium vaccae polypeptides - used to develop products for use in
XX detection, therapy and prevention of mycobacteria infections or as immune
XX response enhancers.
XX
XX Example 8; Page 99; 153pp; English.

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```

CC This oligonucleotide is used in the DNA cloning strategies of the
CC Mycobacterium vaccae antigens. The invention provides M. vaccae
CC polypeptides that comprise an immunogenic portion of a soluble M. vaccae
CC antigen, or a variant, where the antigen induces an immune response in
CC patients previously exposed to a mycobacterium. Such M. vaccae
CC polypeptides can be used in methods for enhancing non-specific immune
CC response. The methods and products can be used for the detection,
CC treatment and prevention of infectious diseases caused by mycobacteria
CC such as M. vaccae, M. avium or M. tuberculosis. The products also have
CC the ability to induce cell proliferation and cytokine production (e.g.
CC interferon-gamma and interleukin-12 production) in T cells, NK cells, B
CC cells, or macrophages. They can be used for enhancing immune responses
CC for use in vaccines or immunotherapy of infectious diseases and cancers
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAATACAAAAGAA 5412
Db 1 AAAAAAAAAAAAAAAAAA 20

RESULT 828
AAV68373
ID AAV68373 standard; DNA; 20 BP.
XX
XX AAV68373;
XX
XX 10-MAR-1999 (first entry)
XX
XX Adapter primer oligonucleotide #12 for CAG repeat analysis.
XX
XX CAG repeat; human; genome analysis; adapter primer; medical diagnostic;
XX nucleic acid analysis; variation assessment; neurological disease;
XX Huntington's chorea; PCR suppression; ss.
XX
XX Synthetic.
XX
XX WO9849345-A1.
XX
XX 05-NOV-1998.
XX
XX 29-APR-1998; 98WO-US008616.
XX 29-APR-1997; 97US-0045078P.
XX
XX (UYBO-) UNIV BOSTON.
XX
XX Smith CL;
XX
XX WPI, 1998-594983/50.
XX
XX Analyzing nucleic acid samples - using amplification primers which
XX contain CAG or CTG tri-nucleotide repeats for differential display of
XX samples from different sources.
XX
XX Example; Page 31; 44p; English.
XX
XX This sequence represents an adapter primer oligonucleotide. It was used
XX to isolate CAG repeat containing sequences from the human genome to test
XX the method of the invention. The method is for analysing nucleic acids in
XX a sample, and comprises: (a) providing a sample containing nucleic acid,
XX a first oligonucleotide primer comprising a CTG repeat, a second
XX oligonucleotide primer comprising a CAG repeat and a polymerase and PCR
XX reagents; (b) preparing said nucleic acid so that it is amplifiable; (c)
XX amplifying the nucleic acid with the first and second primers; and (d)
XX detecting the amplified product. The method is used to distinguish
XX between the expression of genes in two or more biological samples, e.g.
XX body fluids, cells, solid tissue or solid and liquid foods. It can be
XX used in medical diagnostics, e.g. to differentiate between normal and

```

CC diseased tissue or to assess the variation within monozygotic twin pairs.
 CC The method allows the isolation and analysis of genome subsets containing
 CC CAG repeats which are known to be important in a number of neurological
 CC diseases including Huntington's chorea. The method uses PCR suppression,
 CC in which only fragments which contain a target repeat are efficiently
 CC amplified. This allows accurate identification of differentially
 CC expressed genes in various cell types. Genome complexity is reduced by
 CC the new method which targets genomic subsets containing CAG repeats
 CC
 SQ Sequence 20 BP; 1 A; 7 C; 6 G; 6 T; 0 U; 0 Other;
 QY Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 Db 2641 CTGCAGCTGCTGCTGCAGCC 2660
 1 CTGCTGCTGCTGCTGCTGAC 20
 RESULT 829
 AAT86606/c
 ID AAT86606 standard; DNA; 20 BP.
 AC AAT86606;
 XX
 DT 04-JUN-1998 (first entry)
 DE Oligonucleotide separated by capillary affinity gel electrophoresis.
 XX
 KW Capillary affinity gel electrophoresis; separation; polymer-gel;
 KM polyacrylamide; ss.
 XX
 OS Synthetic.
 XX
 PN MO9745721-A1.
 PD 04-DEC-1997.
 XX
 PF 23-MAY-1997; 97MO-EP002647.
 XX
 PR 24-MAY-1996; 96CH-00001320.
 XX
 PA (NOVS) NOVARTIS AG.
 PI Muscate A, Paulus A, Natt F;
 XX
 DR WPI; 1998-041763/04.
 XX
 PT Separation of electrically charged target molecules - by capillary
 PT affinity gel electrophoresis using polymer-gel to which receptors for
 PT target molecules are bound.
 XX
 PS Example D3; Page 25; 41pp; English.
 XX
 CC A mixture of oligonucleotides (AAT86604-7) were separated by a new
 CC process using capillary affinity gel electrophoresis. The invention
 CC relates to selective separation of electrically charged target molecules
 CC in an analytical mixture. It comprises capillary affinity gel
 CC electrophoresis using a capillary tube which is at least partly filled
 CC with a polymer gel. Receptors for target molecules are covalently bound
 CC to the polymer. An electric field of at least 50 volts/cm is applied. The
 CC capillary tube is charged with the analytical mixture. In a first
 CC separation stage, the target molecules in the mixture are bound to the
 CC receptors and the remaining components are eluted, optionally whilst
 CC splitting open. In a second stage, the elution conditions are changed,
 CC optionally in stages, so that the affinity of the target molecules for
 CC the receptor is eliminated and the target molecules are eluted and
 CC detected, optionally whilst splitting open. The process is useful for
 CC selective separation and/or determination of charged organic compounds,
 CC such as oligonucleotides, peptides or carbohydrates. It may be used, e.g.
 CC for isolation of specific proteins and DNA molecules, purification of
 CC antibodies, analysis of antisense compounds or screening for enzyme

CC inhibitors. The process achieves higher resolution and selectivity than
 CC prior art processes, especially in the case of complex biological
 CC analytical mixtures. It has high sensitivity, even with small amounts of
 CC samples. The derivatised polymers may be synthesised specifically using
 CC standard methods
 CC
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 QY Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 Db 5393 AAAAAAATCAAAAAGAAA 5412
 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 830
 AAX57365
 ID AAX57365 standard; DNA; 20 BP.
 AC AAX57365;
 XX
 DT 24-JUL-1999 (first entry)
 DE P. obeseus beaon PCR primer 3.
 XX
 KW Beacon; hypothalamus; obese; lean; agonist; antagonist; treatment;
 KM obesity; anorexia; weight maintenance; energy imbalance; diabetes;
 KM metabolic syndrome; dyslipidemia; hypertension; insulin resistance;
 KM medicament; livestock; diagnosis; PCR primer; ss.
 XX
 OS Synthetic.
 OS Peamomys obeseus.
 XX
 PN WO9232317-A1.
 PD 14-MAY-1999.
 XX
 PF 30-OCT-1998; 98WO-AU000902.
 XX
 PR 31-OCT-1997; 97AU-00000117.
 PR 11-NOV-1997; 97AU-00000323.
 XX
 PA (ITDI-) INT DIABETES INST.
 PA (UYDE-) INT DEAKIN.
 XX
 PI Zimmet PZ, Collier G;
 XX
 DR WPI; 1999-337484/28.
 XX
 PT New gene encoding a beaon protein associated with modulation of obesity,
 PT diabetes and metabolic energy levels.
 XX
 PS Example 7; Page 52; 85pp; English.
 XX
 CC This invention describes a novel beaon protein and its encoding nucleic
 CC acid which is expressed in larger amounts in hypothalamus tissue of obese
 CC animals compared to lean animals. Agonists and antagonists of beaon can
 CC be used to treat obesity, anorexia, weight maintenance, energy imbalance,
 CC diabetes, metabolic syndrome, dyslipidemia, hypertension and/or insulin
 CC resistance. The beaon protein, itself is used to manufacture medicaments
 CC for treatment of obesity, anorexia, energy imbalance or diabetes. The
 CC treatment is contemplated for both human and animals, such as those
 CC important to the livestock industry. The antibody and polynucleotides are
 CC useful in diagnosis of conditions as above. This sequence represents a
 CC PCR primer used in the method of the invention
 CC
 SQ Sequence 20 BP; 5 A; 9 C; 3 G; 3 T; 0 U; 0 Other;
 QY Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1262 GCCTACAGCCCAACAC 1281
 DB 1 GCCTACAGCTTACACAC 20

RESULT 831
 ID AAX27533/c
 XX AAX27533 standard; RNA; 20 BP.

AC AAX27533;

DT 27-MAY-1999 (first entry)

DE Synthetic RNA sequence produced by the method of the invention.

XX Silyloxyethyl, phosphonate, silyloxyethyl halide; diagnosis; ss;
 KW cyanoethyl phosphoramidate coupling; isomerisation; steric hindrance.

OS Synthetic.

PN WO9909044-A1.

PD 25-FEB-1999.

PF 17-AUG-1998; 98WO-EP005215.

PR 18-AUG-1997; 97CH-00001931.

PA (PITS/) PITSCH S.

PA (WEIS/) WEISS P A.

PA (JENN/) JENNY L.

PI Pitsch S, Weiss PA, Jenny L;

DR WPI, 1999-180963/15.

PT 2-Silyloxyethyl ribonucleosides and their phosphonate derivatives - have
 PT high purity, use in machine synthesis of ribonucleic acids, enable longer
 PT oligonucleotide chain construction, and larger amounts.

PS Example 6, Page 25; 38pp; English.

XX The invention relates to silyloxyethyl protected D- or L-ribonucleosides
 CC and their phosphonates (I), and silyloxyethyl halides (II). (I) are
 CC intermediates for synthesis of RNA-oligonucleotides with predetermined
 CC nucleotide sequence, particularly by machine synthesis. The groups
 CC specified above, apart from those on silyl, are those particularly for
 CC the cyanoethyl phosphoramidate coupling. Uses of the oligoribonucleotide
 CC products in diagnosis, therapy, and as research tools, are well known,
 CC and are not dealt with in detail. (II) is an intermediate for (I). The
 CC silyloxyethyl halide reagent is easy to prepare, and yields are high.
 CC Introduction of the silyloxyethyl group into the ribonucleoside is
 CC simple and rapid, and the acetal bond formed does not migrate,
 CC eliminating particularly the prior art problem of 2' to 3' isomerisation.
 CC The methylenedioxy group spacer between the silyl group and nucleoside
 CC ring results in less steric hindrance than bulky direct silyloxy
 CC linkages, enabling first, a range of choices for the silyl substituents,
 CC to provide, e.g., acid or base stability; and second, higher yields in
 CC coupling. Purer products are therefore obtained than in prior art,
 CC enabling larger quantities and longer chains of oligoribonucleotides to
 CC be synthesised successfully, and in shorter times

XX Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 20 U; 0 Other;

QY Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAATACAAAAAGAAA 5412
 DB 20 AAAAAAAAAAAAAAAAAA 1

RESULT 832
 ID AA204702/c
 XX AA204702 standard; DNA; 20 BP.

AC AA204702;

DT 07-OCT-1999 (first entry)

DE PCR primer used to amplify an ORF of Chlamydia trachomatis.

XX Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
 KW paratrachoma; inclusion conjunctivitis; genital disease; perithelitis;
 KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
 KW Bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.

OS Synthetic.

PN Chlamydia trachomatis.

PN WO928475-A2.

PD 10-JUN-1999.

PF 27-NOV-1998; 98WO-IB001939.

PR 28-NOV-1997; 97FR-00015041.

PR 17-DEC-1997; 97FR-00016034.

PR 04-NOV-1998; 98US-0107077P.

PA (BEST) GENSET.

PA Griffais R;

PI WPI, 1999-371125/31.

DR Genome sequence of Chlamydia trachomatis.

PT Disclosure; Page 1710; 1755pp; English.

XX PCR primers AA201426-206209 were used to amplify open reading frames
 CC (ORFs) of the genome of Chlamydia trachomatis (see AA201425). These ORFs
 CC encode polypeptides (see AA36754-37949) which can be used as vaccines
 CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
 CC be used to control growth of the microorganism. Chlamydia trachomatis is
 CC responsible for a large number of diseases, e.g. eye diseases such as
 CC conjunctivitis; genital diseases such as nongonococcal urethritis;
 CC epididymitis, cervicitis, salpingitis, perithelitis, Bartholinitis;
 CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
 CC The polypeptides of the invention may be of use in treating these
 CC diseases

XX Sequence 20 BP; 7 A; 3 C; 7 G; 3 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5326 GCAGGCTTCCAGTTTAC 5345
 DB 20 GCAGGCTTCCAGTTTCC 1

RESULT 833

AA27889

AC AAX27889 standard; DNA; 20 BP.

DT 02-JUN-1999 (first entry)

DE Probe for human CSR protein coding sequence.

```

KW Cellular stress response protein; CSR1, CSR2, CSR3; human; macrophage;
KM scavenger receptor protein; intracellular stress; arteriosclerosis;
KM diabetic circulatory obstruction; microbial infection; probe; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
XX MO9909159-A1.
XX
XX 25-FEB-1999.
XX
XX 12-AUG-1998; 98WO-JP003602.
XX
XX 13-AUG-1997; 97JP-00233396.
XX
XX 30-JUL-1998; 98JP-00230121.
XX
XX (NISR ) JAPAN TOBACCO INC.
XX
XX Nakamura Y, Tokino T;
XX
XX WPI; 1999-181032/15.
XX
XX Scavenger receptor proteins - for treatment and diagnosis of disorders
XX involving cell stress.
XX
XX Example 10; Page 167; 175pp; Japanese.
XX
XX This sequence represents a probe for DNA encoding a human cellular stress
XX response (CSR) protein of the invention. The CSR proteins are macrophage
XX scavenger receptor proteins. The CSR proteins can be used in the
XX treatment, gene therapy and diagnosis of diseases in which intracellular
XX stress is important, such as arteriosclerosis, diabetic circulatory
XX obstruction, and microbial infection. Expression of the proteins is
XX induced in vivo in response to intracellular stress, and inhibits cell
XX death as a result of such stress
XX
XX Sequence 20 BP; 8 A; 3 C; 6 G; 3 T; 0 U; 0 Other;
XX
SQ
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 568 CTGAAGAGGAGGAGCTGAA 587
DB 1 CTGAACATGAAGAGGCTGAA 20
RESULT 834
AAZ11326
ID AAZ11326 standard; DNA; 20 BP.
XX
XX AAZ11326;
XX
XX 25-OCT-1999 (first entry)
XX
XX Mycobacterial 16S rRNA specific oligo AD12.
XX
XX Mycobacterium vaccae protein; antigen; T cell activation; cytokine;
XX dendritic cell maturation; infectious disease; immune disorder; cancer;
XX respiratory system; mycobacterial infection; allergy; tuberculosis;
XX leprosy; sarcoidosis; lung cancer; asthma; skin disorder; psoriasis;
XX dermatitis; eczema; alopecia areata; skin cancer; basal carcinoma;
XX squamous cell carcinoma; melanoma; PCR primer; ss.
XX
XX Synthetic.
XX Mycobacterium vaccae.
XX
XX MO9932634-A2.
XX
XX 01-JUL-1999.
XX
XX 23-DEC-1998; 98WO-NZ000189.
XX

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PR 23-DEC-1997; 97US-0096624.
PR 23-DEC-1997; 97US-0097080.
PR 23-DEC-1997; 97US-0097362.
PR 11-JUN-1998; 98US-00095855.
PR 17-SEP-1998; 98US-00156181.
PR 04-DEC-1998; 98US-00205426.
XX
XX (GENE-) GENESIS RES & DEV CORP LTD.
XX
XX Tan P, Watson J, Vlesser ES, Skinner MA, Prestidge RL;
XX
XX WPI; 1999-430163/36.
XX
XX Enhancing immune response to an antigen.
XX
XX Example 15; Page 177; 243pp; English.
XX
XX The invention provides heat-killed Mycobacterium vaccae, or recombinant
XX M. vaccae proteins. The M. vaccae proteins may be employed to activate T
XX cells and natural killer cells, to stimulate the production of cytokines,
XX to enhance the expression of co-stimulatory molecules on dendritic cells
XX and monocytes, and to enhance dendritic cell maturation and function. The
XX proteins can be expressed by standard recombinant methodology.
XX Pharmaceutical compositions comprising the proteins or nucleic acid
XX sequences encoding the proteins can be used for the treatment,
XX prevention, and detection of disorders including infectious diseases,
XX immune disorders and cancer. In particular, the compounds and methods are
XX used for treatment of diseases of the respiratory system, such as
XX mycobacterial infections, asthma, allergies, tuberculosis, leprosy,
XX sarcoidosis and lung cancers, and disorders of the skin such as
XX psoriasis, atopic dermatitis, eczema, allergic contact dermatitis,
XX alopecia areata, and skin cancers such as basal carcinoma, squamous cell
XX carcinoma and melanoma
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
SQ
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAATATCAAAAAGAA 5412
DB 1 AAAAAAAAAAAAAAAAAA 20
RESULT 835
AAV64851
ID AAV64851 standard; DNA; 20 BP.
XX
XX AAV64851;
XX
XX 05-FEB-1999 (first entry)
XX
XX B. cereus 16S rRNA oligonucleotide primer #8.
XX
XX 16S rRNA; primer; detection; PCR; microbe; ss.
XX
XX Synthetic.
XX Bacillus cereus.
XX
XX JP10295377-A.
XX
XX 10-NOV-1998.
XX
XX 30-APR-1997; 97JP-00113200.
XX
XX 30-APR-1997; 97JP-00113200.
XX
XX (QPP ) QP CORP.
XX
XX WPI; 1999-038276/04.
XX
XX An oligonucleotide primer - useful for detection of Cereus microbes.
XX

```

XX Example 2, Page 6, 8bp, Japanese.
PS
XX
CC AAV64844-V64852 are oligonucleotide primers used in a method to detect
CC the presence of *Bacillus cereus* 16S rRNA by PCR methods. The method can
CC detect *Bacillus cereus* microbe rapidly, easily and exactly
XX
SQ Sequence 20 BP; 1 A; 7 C; 3 G; 9 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 64 TTCTGAAGCCATTCCCTG 83
1 TTCTGTATGCCCTTCCCTG 20
DB
RESULT 836
AAK21950/c
ID AAK21950 standard; DNA; 20 BP.
XX
AC AAK21950;
XX
DT 18-MAY-1999 (first entry)
XX
DE Human B-raf kinase antisense oligonucleotide IS16#13744.
XX
KW Antisense oligonucleotide; B-raf; human; inhibitor; T-cell activation;
KW hyperproliferative disorder; cancer; restenosis; psoriasis;
KW atherosclerosis; raf-associated tumour; diagnosis; therapy; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /note= "phosphorothioate bases"
XX
PN WO902167-A1.
XX
PD 21-JAN-1999.
XX
PF 06-JUL-1998; 98MO-US013961.
XX
PR 07-JUL-1997; 97US-00888982.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Monia BP;
XX
DR WPI; 1999-120502/10.
XX
PT New antisense oligonucleotides - for modulation of human B-raf gene
XX expression.
XX
PS Disclosure; Page 22; 72pp; English.
XX
SQ This sequence represents an example of an antisense oligonucleotide of
CC the invention. The oligonucleotides are 8-50 nucleotides in length, and
CC are targeted to a nucleic acid encoding human B-raf and which is capable
CC of inhibiting human B-raf expression. The oligonucleotides is used to
CC inhibit the (abnormal) expression of human B-raf, to inhibit
CC hyperproliferation of cells, to treat or prevent an abnormal
CC proliferative condition, e.g. hyperproliferative disorders such as cancer
CC (e.g. of the brain or nervous system), restenosis, psoriasis or a
CC disorder characterised by T-cell activation and growth. They may also be
CC used to diagnose these diseases, as well as atherosclerosis. The
CC oligonucleotides of the invention may be used to distinguish raf-
CC associated tumours from tumours having other etiologies. The antisense
CC oligonucleotides can also be used to quantify raf expression in assays
XX

SQ Sequence 20 BP; 2 A; 3 C; 1 G; 14 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5412 AAATGAAATTAAGGATA 5431
20 AAAAGGAAATTAATGACA 1
DB
RESULT 837
AAK96207/c
ID AAK96207 standard; DNA; 20 BP.
XX
AC AAK96207;
XX
DT 13-SEP-1999 (first entry)
XX
DE PCR primer used to amplify an ORF of *Chlamydia pneumoniae*.
XX
KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KW neutralising epitope; PCR primer; ss.
XX
OS Synthetic.
OS *Chlamydia pneumoniae*.
XX
PN WO9927105-A2.
XX
PD 03-JUN-1999.
XX
PF 20-NOV-1998; 98MO-IB001890.
XX
PR 21-NOV-1997; 97FR-00014673.
PR 04-NOV-1998; 98US-0107078P.
XX
PA (GEST) GENSET.
XX
PI Griffiths R;
XX
DR WPI; 1999-357842/30.
XX
PT Genome sequence of *Chlamydia pneumoniae*.
XX
PS Page 1808; Disclosure; 1912pp; English.
XX
SQ AAK91991-X97517 represent PCR primers used to amplify open reading frames
CC and other nucleic acid sequences from the genome of *Chlamydia pneumoniae*
CC (see AAK91990). C. pneumoniae causes respiratory disease such as
CC pneumonia and bronchitis and is thought to be a contributing factor in
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC nodosum or pharyngitis. The polypeptides encoded by the open reading
CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC nucleotide sequences can also be used as immunogenic compositions,
CC especially where the vector directs the expression of a neutralising
CC epitope of C. pneumoniae
XX
SQ Sequence 20 BP; 1 A; 4 C; 6 G; 9 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 2046 ATCAACAAAGAGCTCTGGG 2065
20 ACCAACAACAGCTCAGGG 1
DB
RESULT 838
AAK94976
ID AAK94976 standard; DNA; 20 BP.

```
XX AC AAX94976;
XX XX
XX DT 13-SEP-1999 (first entry)
XX XX
XX DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX XX
XX KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
XX KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
XX KW neutralising epitope; PCR primer; ss.
XX XX
XX OS Synthetic.
XX OS Chlamydia pneumoniae.
XX PN WO9927105-A2.
XX XX
XX PD 03-JUN-1999.
XX XX
XX PF 20-NOV-1998; 98WO-IB001890.
XX XX
XX PR 21-NOV-1997; 97FR-00014673.
XX PR 04-NOV-1998; 98US-0107078P.
XX XX
XX PA (GEST ) GENSET.
XX XX
XX PI Griffais R;
XX XX
XX DR WPI; 1999-357842/30.
XX XX
XX PT Genome sequence of Chlamydia pneumoniae.
XX PS Page 1712; Disclosure; 1912pp; English.
XX XX
XX CC AAX91991-X97517 represent PCR primers used to amplify open reading frames
XX CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
XX CC (see AAX91990). C. pneumoniae causes respiratory disease such as
XX CC pneumonia and bronchitis and is thought to be a contributing factor in
XX CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
XX CC nodosum or pharyngitis. The polypeptides encoded by the open reading
XX CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
XX CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
XX CC nucleotide sequences can also be used as immunogenic compositions,
XX CC especially where the vector directs the expression of a neutralising
XX CC epitope of C. pneumoniae
XX CC
XX SQ Sequence 20 BP; 3 A; 1 C; 9 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 9.3e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 2547 GGCGCTGTTAAGTATGAGG 2566
XX ||||| |||||
XX 1 GGCGCTGTTAAGTATGAGG 20
XX
XX RESULT 839
XX AAA40449
XX ID AAA40449 standard; DNA; 20 BP.
XX XX
XX AC AAA40449;
XX XX
XX DT 13-NOV-2000 (first entry)
XX XX
XX DE Electrochemical detection method sample DNA target.
XX XX
XX KW Electrochemical detection; glucose; cholesterol; urea nitrogen;
XX KW bilirubin; uric acid; haemoglobin; lactic acid; body fluid; blood;
XX KW plasma; serum; urine; lymph diagnosis; ss.
XX XX
XX OS Synthetic.
XX XX
XX PN EP1018646-A2.
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```
XX PD 12-JUL-2000.
XX XX
XX PF 07-JAN-2000; 2000EP-00100126.
XX XX
XX PR 06-JAN-1999; 99JP-00001111.
XX PR 24-MAY-1999; 99JP-00143599.
XX XX
XX PA (FUJI ) FUJI PHOTO FILM CO LTD.
XX XX
XX PI Ogawa M, Takenaka S, Takagi M;
XX XX
XX DR WPI; 2000-444372/39.
XX XX
XX PT Quantitative analysis of a biochemical compound such as glucose, in body
XX PT a body fluid such as blood, comprising detecting enhanced electron
XX PT transfer between an oxidase and a DNA-immobilized electrode, useful for
XX PT diagnosis of disease.
XX PS Example 1; Page 8; 14pp; English.
XX XX
XX CC This invention describes a novel method for quantitatively analysing a
XX CC biochemical compound (I) which comprises contacting (I) with double
XX CC stranded DNA fixed to the surface of an electrode at their terminals in
XX CC which electrochemically active threading intercalators are intercalated,
XX CC in an aqueous medium under application of electric potential to the
XX CC electrode in the presence of an oxidase which oxidizes the biochemical
XX CC compound and becomes reduced, and detecting electric current flowing
XX CC between the electrode and a second electrode in the aqueous medium. The
XX CC method is useful for detection of biochemical compounds such as glucose,
XX CC cholesterol, urea nitrogen, bilirubin, uric acid, haemoglobin and lactic
XX CC acid in body fluids such as whole blood, plasma, serum, urine, and lymph
XX CC for diagnosis of various diseases. The method allows detection of
XX CC biochemical compounds quickly and easily with a high sensitivity using a
XX CC simple apparatus. This sequence represents DNA fragment used as a target
XX CC sample in the method of the invention
XX XX
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 9.3e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 5393 AAAAAAAAAAAAAAAAAA 5412
XX ||||| |||||
XX 1 AAAAAAAAAAAAAAAAAA 20
XX
XX Db
XX
XX RESULT 840
XX AAA40448/C
XX ID AAA40448 standard; DNA; 20 BP.
XX XX
XX AC AAA40448;
XX XX
XX DT 13-NOV-2000 (first entry)
XX XX
XX DE Electrochemical detection method fixed probe DNA.
XX XX
XX KW Electrochemical detection; glucose; cholesterol; urea nitrogen;
XX KW bilirubin; uric acid; haemoglobin; lactic acid; body fluid; blood;
XX KW plasma; serum; urine; lymph diagnosis; probe; ss.
XX XX
XX OS Synthetic.
XX XX
XX PN EP1018646-A2.
XX XX
XX PD 12-JUL-2000.
XX XX
XX PF 07-JAN-2000; 2000EP-00100126.
XX XX
XX PR 06-JAN-1999; 99JP-00001111.
XX PR 24-MAY-1999; 99JP-00143599.
XX XX
```

PA (FUJIFILM PHOTO FILM CO. LTD.
 XX
 PI Ogawa M, Takenaka S, Takagi M;
 XX
 DR WPI; 2000-444372/39.
 XX
 PT Quantitative analysis of a biochemical compound such as glucose, in body
 PT a body fluid such as blood, comprising detecting enhanced electron
 PT transfer between an oxidase and a DNA-immobilized electrode, useful for
 PT diagnosis of disease.
 XX
 PS Example 1; Page 7; 14pp; English.
 XX
 CC This invention describes a novel method for quantitatively analyzing a
 CC biochemical compound (I) which comprises contacting (I) with double
 CC stranded DNA fixed to the surface of an electrode at their terminals in
 CC which electrochemically active threading intercalators are intercalated,
 CC in an aqueous medium under application of electric potential to the
 CC electrode in the presence of an oxidase which oxidizes the biochemical
 CC compound and becomes reduced, and detecting electric current flowing
 CC between the electrode and a second electrode in the aqueous medium. The
 CC method is useful for detection of biochemical compounds such as glucose,
 CC cholesterol, urea nitrogen, bilirubin, uric acid, haemoglobin and lactic
 CC acid in body fluids such as whole blood, plasma, serum, urine, and lymph
 CC for diagnosis of various diseases. The method allows detection of
 CC biochemical compounds quickly and easily with a high sensitivity using a
 CC simple apparatus. This sequence represents DNA fragment used as fixed
 CC probe DNA in the method of the invention
 CC
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 OY 5393 AAAAAAAAAATCAAAAGAAA 5412
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 841
 ABL41405
 ID ABL41405 standard; DNA; 20 BP.
 AC ABL41405;
 XX
 DT 07-MAY-2002 (first entry)
 XX
 DE Universal primer 2 for the genetic diagnosis of species.
 XX
 KW Primer; universal primer; genetic diagnosis; ss.
 XX
 OS Unidentified.
 OS
 PN KR98082207-A.
 XX
 PD 05-DEC-1998.
 XX
 PF 02-MAY-1997; 97KR-00016981.
 XX
 PR 02-MAY-1997; 97KR-00016981.
 XX
 PA (RURA-) RURAL DEV ADMINISTRATION.
 XX
 PI Kang HW, Cho YG, Eun MY, Koh SJ;
 XX
 DR WPI; 2000-069105/06.
 XX
 PT Universal primer for genetic diagnosis of species.
 XX
 PS Disclosure; Page 10; 21pp; Korean.
 XX
 CC The invention relates to universal primers for the genetic diagnosis of

CC species. The current sequence represents a universal primer for the
 CC genetic diagnosis of species
 CC
 SQ Sequence 20 BP; 2 A; 3 C; 9 G; 6 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 OY 3913 GTGTGGACCACTTCTGGG 3932
 Db 1 GTGTGGACCACTTCTGGG 20
 RESULT 842
 AAA12081/c
 ID AAA12081 standard; DNA; 20 BP.
 AC AAA12081;
 XX
 DT 07-AUG-2000 (first entry)
 XX
 DE Human ICAM-1 antisense oligonucleotide 650D.
 XX
 KW Antisense; primer; ICAM-1; human; adhesion molecule; cytostatic;
 KW anti-inflammatory; dermatological; antiviral; antirheumatic; asthma;
 KW antiarthritic; immunosuppressive; antipsoriatic; antiasthmatic;
 KW antitussive gene therapy; inflammatory disease; virus infection;
 KW metastasis; hematopoietic stem mobilization; ulcerative colitis;
 KW rheumatoid arthritis; lupus erythematosus; organ rejection; psoriasis;
 KW graft-versus-host reaction; neurodermatitis; gum disease; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200018907-A2.
 XX
 PD 06-APR-2000.
 XX
 PF 21-SEP-1999; 99WO-EP006972.
 XX
 PR 25-SEP-1998; 98DE-01044111.
 PR 04-DEC-1998; 98DE-01056138.
 PR 08-JUN-1999; 99DE-01026110.
 XX
 PA (DEKR-) DEUT KREBSFORSCHUNGSZENTRUM.
 XX
 PI Patzel V, Kronenwett R, Steidl U, Haas R, Sczakiel G;
 XX
 DR WPI; 2000-293146/25.
 XX
 DE Novel antisense nucleic acid targeted to specific sequences within the
 PT ICAM-1 gene, useful for treating inflammation and metastasis.
 XX
 PS Claim 1; Page 24; 28pp; German.
 XX
 CC This invention describes novel antisense nucleic acids (I) targeted
 CC against a specific nucleic acid sequence within human ICAM-1. The
 CC products of the invention have cytostatic, anti-inflammatory,
 CC dermatological, antiviral, antirheumatic, antiarthritic,
 CC immunosuppressive, antipsoriatic, antiasthmatic, antitussive activity and
 CC can be used for antisense therapy; gene therapy. The antisense nucleic
 CC acids or vectors are used to inhibit or eliminate acute or chronic
 CC inflammatory diseases of humans; virus infection, metastasis,
 CC inflammation of the skin, mobilization of hematopoietic stem cells,
 CC coughs and all biological processes under the influence of ICAM-1,
 CC ulcerative colitis, rheumatoid arthritis, lupus erythematosus, organ
 CC rejection, graft-versus-host reaction after bone marrow transplantation,
 CC psoriasis, asthma and neurodermatitis. In particular, the antisense
 CC nucleic acids are used to treat acute or chronic inflammation of gum
 CC disease. The antisense nucleic acids regulate or suppress ICAM-1 gene
 CC expression. The antisense nucleic acids or vectors can be used to
 CC suppress immune reactions against gene therapy using viral or non-viral
 CC vectors in mammals. The antisense nucleic acids may also be used in kits

CC to diagnose ICM-1 associated disturbances. AAA12063-A12092 and AAA12099
CC represent the antisense oligonucleotides described in the method of the
CC invention
XX
SQ Sequence 20 BP; 2 A; 7 C; 5 G; 6 T; 0 U; 0 Other;
QY Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
DB 2844 GCACAGATCAATGAGCC 2863
20 GCGAGATCCATGAGCC 1
RESULT 843
AAZ37992/C
ID AAZ37992 standard; DNA; 20 BP.
XX
AC AAZ37992;
XX
DT 07-FEB-2000 (first entry)
XX
DE Human GLC1A gene exon 1 specific reverse primer.
XX
KW Glaucoma; PCR amplification; primary open wide angle glaucoma;
KM GLC1A gene; human; PCR primer; ss.
XX
OS Synthetic.
XX Homo sapiens.
XX
PN WO951779-A2.
XX
PD 14-OCT-1999.
XX
PF 07-APR-1999; 99WO-US007671.
XX
PR 07-APR-1998; 98US-00056285.
XX
PA (IOWA) UNIV IOWA RES FOUND.
XX
PI Stone EM, Sheffield VC, Alward WM, Fingert J;
XX
DR WPI; 2000-022956/02.
XX
PT Determination of a predisposition to glaucoma by analysing mutations in
XX the GLC1A gene.
XX
PS Claim 1; Page 131; 137pp; English.
XX
XX The invention relates to a method for the determination of a
CC predisposition to glaucoma. The method comprises amplifying a GLC1A gene
CC with a primer pair selected from the sequences shown in AAZ37981-238008.
CC The primers are used to determine whether a subject has or has the
CC potential to develop primary open wide angle glaucoma. Sequences AAZ37981
CC -238008 represent primer pairs specific for human GLC1A gene exon
CC sequences. These primers were used for the GLC1A assay to identify
CC patients having a predisposition to glaucoma
XX
SQ Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
QY Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
DB 1960 GCGTCTGAGCCAGCAG 1979
20 GCGGACTGTGAGTTCAGCAG 1
RESULT 844
AAC78948/C
ID AAC78948 standard; DNA; 20 BP.

XX AAC78948;
AC
XX
DT 08-FEB-2001 (first entry)
XX
DE Human PRO772 reverse PCR primer SEQ ID NO:577.
XX
KW Human; secreted protein; transmembrane protein; PRO; EST; cytostatic;
KM expressed sequence tag; detection; cancer; PCR primer; probe; ss.
XX
OS Homo sapiens.
XX
PN WO200053756-A2.
XX
PD 14-SEP-2000.
XX
PF 18-FEB-2000; 2000WO-US004341.
XX
PR 08-MAR-1999; 99WO-US005028.
PR 12-MAR-1999; 99US-0123957P.
PR 29-MAR-1999; 99US-0126773P.
PR 21-APR-1999; 99US-0130232P.
PR 28-APR-1999; 99US-0131445P.
PR 14-MAY-1999; 99US-0134287P.
PR 23-JUN-1999; 99US-0141037P.
PR 26-JUL-1999; 99US-0145698P.
PR 29-OCT-1999; 99US-0162506P.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
PR 16-DEC-1999; 99WO-US030099.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers J, Baton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi CJ, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WT;
XX
DR WPI; 2000-611443/58.
XX
XX Novel PRO polypeptides and polynucleotides used in detection methods, to
PT target bioactive molecules to specific cells, and to modulate cellular
PT activities.
XX
PS Example 114; Page 342; 636pp; English.
XX
CC AAC78458 to AAC78599 represent polynucleotide and EST (expressed sequence
CC tag) sequences which encode secreted or transmembrane PRO polypeptides.
CC The PRO polynucleotides and polypeptides have cytostatic activity. The
CC polynucleotides and polypeptides can be used for detecting the presence
CC of PRO polypeptides in samples, for linking bioactive molecules to cells
CC and for modulating biological activities of cells, using the polypeptides
CC for specific targeting. The polypeptide targeting can be used to kill the
CC target cells, e.g. for the treatment of cancer. The polypeptide pairs
CC provide specific targeting of bioactive molecules to cells. AAC78600 to
CC AAC78987 represent PCR primers and probes used in the isolation of the
CC PRO polynucleotide sequences
XX
SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
QY Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
DB 5196 TCAGCTGGAGGCCACCTG 5215
TCAGCTGGAGGCCACCTG 5215

Db 20 TCAGTGTGAAGGCACGCTG 1

RESULT 845
AAZ9117/c
ID AAZ91117 standard; DNA; 20 BP.
XX
AC AAZ91117;
XX
DT 06-JUN-2000 (first entry)
XX
DE Oligonucleotide #5 for conjugation to abietane derivative.
XX
KM Abietane derivative; labelling; diagnostic test; biotin substitution; ss.
XX
OS Synthetic.
XX
PN FR2781802-A1.
XX
PD 04-FEB-2000.
XX
PF 31-JUL-1998; 98FR-00010084.
XX
PR 31-JUL-1998; 98FR-00010084.
XX
PA (INNER) BIO MERIEUX.
XX
PI Charles MH, Piga N, Battail FN, Veron L, Delair T, Mandrand B;
XX
DR WPI; 2000-239603/21.
XX
PT Saturated and unsaturated derivatives of abietic acid and their
XX conjugated derivatives with natural and synthetic polymers, having use in
XX diagnostics, chemical reactions and analysis.
XX
PS Example 5; Page 20; 39pp; French.
XX
CC The invention relates to novel saturated and unsaturated abietane
XX derivatives. The new compounds may be used directly or indirectly in the
XX development of new diagnostic tests, to follow infections, especially
XX viral infections, to follow and/or measure chemical products, especially
XX potential pollutants. In diagnostic tests they may be used as markers, or
XX to form a universal solid phase after immobilization on a solid support,
XX to produce monoclonal antibodies or polyclonal antibodies having
XX diagnostic uses. The oligonucleotides AAZ91113-291117 represent examples
XX of sequences that can be labeled with the new abietane derivatives. The
XX new derivatives may be used to substitute for biotin in diagnostic tests,
XX but because they are not found naturally in humans the risk of potential
XX interactions with biological molecules is eliminated
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAACAAAAAGAAA 5412
DB 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 846
AAZ88913
ID AAZ88913 standard; DNA; 20 BP.
XX
AC AAZ88913;
XX
DT 26-MAY-2000 (first entry)
XX
DE Human wolframin exon 8-3 PCR primer #2.
XX
KM Wolframin; human; transmembrane protein; diagnosis; therapy;
XX Wolfram Syndrome; psychiatric disease; gene therapy; primer; ss.

XX
OS Homo sapiens.
XX
PN DE19845277-C1.
XX
PD 09-MAR-2000.
XX
PF 01-OCT-1998; 98DE-01045277.
XX
PR 01-OCT-1998; 98DE-01045277.
XX
PA (UWMU-) UNIV MUENCHEN MAXIMILIANS LUDWIG.
XX
PI Strom T, Weilinger T;
XX
DR WPI; 2000-184136/17.
XX
PT Wolframin, a transmembrane protein and related DNA useful for diagnosis
XX and therapy of Wolfram Syndrome, especially where there is a tendency to
XX psychiatric disease.
XX
PS Disclosure; Page 8; 26pp; German.
XX
CC This invention describes a novel human transmembrane protein, wolframin.
XX CC Wolframin and DNA encoding it are useful for diagnosis and/or therapy of
XX CC Wolfram Syndrome, in particular where there is a tendency to psychiatric
XX CC disease. The products of the invention can be used for gene therapy. This
XX CC sequence represents a PCR primer used in the amplification of the human
XX CC wolframin gene
XX
SQ Sequence 20 BP; 9 A; 1 C; 10 G; 0 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5121 GCGCAAGAGCAATAGAGG 5140
DB 1 GCGCAAGAGCAATAGAGG 20

RESULT 847
AAA50193/c
ID AAA50193 standard; DNA; 20 BP.
XX
AC AAA50193;
XX
DT 07-NOV-2000 (first entry)
XX
DE 2'-Methoxyethoxy-modified oligonucleotide.
XX
KM Phosphodiester oligonucleotide; H-phosphonate chemistry; ss.
XX
OS Synthetic.
XX
FT Key Location/Qualifiers
FT modified_base 1..19
FT /*tag= a
FT /note= "2'-methoxyethoxy modified thymidine"
XX
PN WO200047593-A1.
XX
PD 17-AUG-2000.
XX
PF 11-FEB-2000; 2000MO-US003543.
XX
PR 12-FEB-1999; 99US-00250075.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Manoharan M, Maier MA;
XX
DR WPI; 2000-558188/51.

XX Preparation of mixed backbone oligomeric compounds useful as e.g. primers
PT for diagnostic tests, involves oxidation of H-phosphonate internucleoside
PT linkages to phosphodiester internucleoside linkages.
XX
PS Example 12; Page 34; 49pp; English.
XX
CC The present sequence is that of a phosphodiester oligonucleotide
CC containing 20 T nucleobases, 19 having a 2'-methoxyethoxy group on its 5'
CC ribosyl sugar moiety. It is an example of an oligomeric compound produced
CC according to the methods of the invention. The invention provides
CC compounds and methods for the preparation of mixed backbone oligomeric,
CC or chimeric, compounds having phosphodiester internucleoside linkages in
CC addition to phosphorothioate and/or phosphoramidate internucleoside
CC linkages. The methods also include incorporation of boranophosphate
CC internucleoside linkages. The methods utilize H-phosphonate intermediates
CC that are coupled together forming contiguous regions of 1 or more H-
CC phosphonate internucleoside linkages. Each contiguous region is
CC subsequently oxidized to phosphodiester, phosphorothioate,
CC phosphoramidate or boranophosphate internucleoside linkages prior to
CC further elongation. Mixed backbone oligomeric compounds are prepared in
CC this manner by oxidizing adjacent regions with different reagents.
CC Oligomeric compounds of the invention are prepared using novel oxidation
CC steps that oxidize a region of 1 or more H-phosphonate internucleoside
CC linkages without degrading existing linkages that have been previously
CC oxidized. The oligonucleotides obtained are useful as primers in PCR,
CC probes, linkers, gene fragments and for other diagnostic tests on e.g.
CC biological tissue, fluid, cells etc., as research reagents, and as
CC antiviral agents
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAATCAAAAGAAA 5412
DB 20 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 848
AAK9515
ID AAK9515 standard; DNA; 20 BP.
XX
AC AAK9515;
XX
DT 06-AUG-2002 (first entry)
XX
XX URP oligonucleotide relating to a primer of plasmid subspecies 2F.
DE
XX Polymerase chain reaction; PCR; primer; plasmid subspecies 2F; URP; ds.
KW
XX Unidentified.
OS
XX KR9079605-A.
XX
XX 05-NOV-1999.
PD
XX 07-APR-1998; 98KR-00012278.
XX
XX 07-APR-1998; 98KR-00012278.
PR
XX (RURA-) RURAL DEV ADMINISTRATION.
XX
XX Kang HW, Koh SJ, Kwon SW;
PI
XX WPI; 2000-609364/58.
DR
XX Polymerase chain reaction (PCR) primer of plasmid subsp. 2F.
PT
XX Disclosure; Page 4; 10pp; Korean.
XX

CC The invention relates to a polymerase chain reaction (PCR) primer of the
CC plasmid subspecies 2F. This polynucleotide sequence represents a URP
CC oligonucleotide relating to the PCR of the 2F plasmid subspecies of the
CC invention
XX
SQ Sequence 20 BP; 2 A; 3 C; 9 G; 6 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 3913 GGTGGACCACTGCTGGG 3932
DB 1 GGTGGACCACTGCTGGG 20
RESULT 849
AAC58208/C
ID AAC58208 standard; DNA; 20 BP.
XX
AC AAC58208;
XX
DT 25-JAN-2001 (first entry)
XX
XX Human PRO772 reverse PCR primer SEQ ID NO:119.
DE
XX Human; tumour; diagnosis; neoplastic disease; identification; cancer;
XX tumorigenesis; detection; neoplastic cell growth; proliferation;
KW cytostatic; antiinflammatory; immunomodulatory; inflammatory disorder;
KW immunological disorder; hybridisation; probe; PCR primer; ss.
XX
XX Homo sapiens.
OS
XX WO200053754-A1.
PN
XX 14-SEP-2000.
PD
XX
PF 06-JAN-2000; 2000WO-US000277.
XX
XX 08-MAR-1999; 99WO-US005028.
PR
XX 12-MAR-1999; 99US-0123957P.
PR
XX 29-MAR-1999; 99US-0126773P.
PR
XX 21-APR-1999; 99US-0130232P.
PR
XX 28-APR-1999; 99US-0131445P.
PR
XX 05-OCT-1999; 99WO-US023089.
PR
XX 30-NOV-1999; 99WO-US028313.
PR
XX 02-DEC-1999; 99WO-US028551.
PR
XX 02-DEC-1999; 99WO-US028564.
PR
XX 30-DEC-1999; 99WO-US031243.
PR
XX 30-DEC-1999; 99WO-US031274.
XX
XX (GETH) GENENTECH INC.
PA
XX Baker KP, Desauvage FJ, Goddard A, Gurney AL, Klein RD, Roy MA;
PI
XX Wood WI;
XX
XX WPI; 2000-572269/53.
DR
XX
PT New isolated antibody for use in compositions and methods for the
PT diagnosis and treatment of neoplastic cell growth and proliferation in
PT mammals, including humans, and in monitoring tumor treatment.
XX
XX Example 14; Page 118; 195pp; English.
XX
CC The present invention describes an isolated antibody (Ab) that binds to
CC one of the human proteins (p) designated PRO13, PRO130, PRO149,
CC PRO237, PRO324, PRO351, PRO615, PRO618, PRO619, PRO618, PRO618,
CC PRO772, PRO703, PRO792 or PRO474. The Ab can be used in compositions and
CC methods for the diagnosis and treatment of neoplastic cell growth and
CC proliferation in mammals, including humans. Genes and polypeptides
CC encoded by them, that are amplified in the genome of a tumour cell, can
CC be identified and are useful targets for the treatment and prevention of
CC certain cancers and may be used to monitor tumour treatment. Compounds

CC that inhibit the expression or activity of the identified polypeptides
 CC can be identified and used as antagonists. Benign or malignant tumours,
 CC inflammatory disorders and immunological disorders can be treated.
 CC AAC58123 to AAC58224 represent hybridisation probes and PCR primers used
 CC in the isolation of the human PRO sequences. AAC58225 to AAC58241 and
 CC AAB24041 to AAB24056 represent human PRO polynucleotide and protein
 CC sequences given in the exemplification of the present invention

XX
 SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 9.3e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Db 5196 TCAGCTGGAGGCCACGTG 5215
 20 TCAGTGTGAAGGCCACGTG 1

RESULT 850

ID AAA88871 standard; DNA, 20 BP.

AC AAA88871;

DT 19-FEB-2001 (first entry)

XX Protein tyrosine phosphatase PCR primer betaseq2.

XX Vascular-endothelial protein tyrosine phosphatase; VE-PTP; mouse; Tie-2;

KM receptor-type tyrosine kinase; antiangiogenic; antitumour;

KM anti-metastatic; tumour; metastasis; angiogenesis; therapy; PCR primer;

XX ss.

OS Mus musculus.

PN BP1046715-A1.

XX 25-OCT-2000.

PF 23-APR-1999; 99EP-00108074.

PR 23-APR-1999; 99EP-00108074.

PA (PLAC) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.

PI Fachinger G, Rissau B, Deutsch U;

XX WPI; 2000-648932/63.

PT Monitoring or modulating Tie-2 tyrosine kinase activity, useful e.g. for

PT regulating tumor growth, using vascular-endothelial protein tyrosine

PT phosphatase.

XX

PS Example 2; Page 4; 60pp; English.

XX

CC The present sequence is that of primer betaseq2, which was used with

CC primer betaseq (see AAA88871) in the PCR amplification of a 416 bp

CC fragment of mouse vascular-endothelial protein tyrosine phosphatase (VE-

CC PTP) cDNA (see AAA88865). PCR analysis was used to examine VE-PTP

CC expression in mouse tissues and during mouse embryonic development. In

CC adult mouse, VE-PTP was strongly expressed in brain as well as in lung

CC and heart. In embryonic development, VE-PTP increased from day E11 to day

CC E17. VE-PTP polypeptides, nucleic acids and ligands are used in claimed

CC methods for detecting and modulating receptor tyrosine kinase Tie-2

CC activity. This allows the monitoring or modulation of angiogenesis,

CC induction or inhibition of vascular growth or remodelling and blood

CC vessel maturation, and inhibition of tumour growth or metastasis

XX

XX Sequence 20 BP; 1 A; 11 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 9.3e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Query 234 CCCTACCCCTCCCTGGCTG 253

Db 1 CCCTTCCTCTCTACTG 20

RESULT 851

ID AAA57408 standard; DNA, 20 BP.

AC AAA57408;

DT 03-OCT-2000 (first entry)

XX PCR primer for DNA encoding beta-actin.

XX Beta-actin; adipose tissue; adipocyte; fibroblast;

KM beta3 adrenergic receptor; cell differentiation; obesity; diabetes;

KM hyperlipidemia; antilipid; PCR primer; ss.

XX Cricetus sp.

XX WO200037607-A2.

XX 29-JUN-2000.

PF 17-DEC-1999; 99MO-FR003174.

PR 18-DEC-1998; 98FR-00016006.

PA (CNRS) CENT NAT RECH SCI.

PI Gros U, Gerhardt C, Strosberg AD;

XX WPI; 2000-482482/42.

XX Production of adipocytes from fibroblasts, useful e.g. for screening for

XX potential anti-obesity agents, by culturing confluent cells stably

XX expressing the beta3 adrenergic receptor.

XX Example 1; Page 8; 20pp; French.

XX PCR primers AAA57407-08 were used to amplify DNA encoding beta-actin. The

XX reactions were performed to analyse and compare the products of adipose

XX tissue. The specification describes a method for the production of

XX adipocytes from non-differentiated fibroblasts. The method comprises

XX culturing confluent fibroblasts that stably express the human beta3

XX adrenergic receptor, or its W64R mutant, in a medium containing agents

XX that stimulate differentiation of the cells. The adipocytes are useful as

XX models for studying biological mechanisms in adipocytes, and to screen

XX for agents potentially useful in treatment of obesity, diabetes and

XX hyperlipidemia, specifically antilipid agents

XX

SQ Sequence 20 BP; 3 A; 3 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 9.3e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Query 1262 GCCTACAGCCCAACACAC 1281

Db 20 GCCTACAGCTTCACACAC 1

RESULT 852

ID AAD14829 standard; DNA, 20 BP.

AC AAD14829;

DT 01-NOV-2001 (first entry)

XX

DE Human glycogen synthase kinase 3 alpha antisense oligo ISIS #116670.
 XX
 KW Human; glycogen synthase kinase 3 alpha; antidiabetic; cytostatic;
 KW antisense therapy; diabetes; hyperproliferative disorder; inflammation;
 KW neurological disorder; tumour; haematopoietic disorder; infection;
 KW hyperproliferative disorder; developmental disorder; antisense;
 KW phosphorothioate backbone; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key
 FT modified_base 1..20
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone"
 FT modified_base 1..5
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "Methoxyethyl residues"
 FT modified_base 1
 FT /tag= d
 FT /mod_base= m5c
 FT modified_base 3
 FT /tag= e
 FT /mod_base= m5c
 FT modified_base 8
 FT /tag= f
 FT /mod_base= m5c
 FT modified_base 9
 FT /tag= g
 FT /mod_base= m5c
 FT modified_base 11
 FT /tag= h
 FT /mod_base= m5c
 FT modified_base 13
 FT /tag= i
 FT /mod_base= m5c
 FT modified_base 15
 FT /tag= j
 FT /mod_base= m5c
 FT modified_base 16..20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "Methoxyethyl residues"
 FT modified_base 18
 FT /tag= k
 FT /mod_base= m5c
 XX
 PN WO200152865-A1.
 XX
 PD 26-JUL-2001.
 XX
 PF 16-JAN-2001; 2001WO-US001411.
 XX
 PR 21-JAN-2000; 2000US-00488856.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Monia BP, McKay R, Butler MM, Wyatt JR;
 XX WPI; 2001-442247/47.
 XX
 DR Antisense compound 8 to 30 nucleobases in length comprising a compound
 XX that is targeted to a nucleic acid molecule encoding glycogen synthase
 XX kinase 3 alpha, useful for the treatment of e.g. diabetes and
 XX hyperproliferative disorders.
 XX
 PS Example 15; Page 84; 115pp; English.
 XX
 CC The invention relates to an antisense compound 8 to 30 nucleobases in
 CC length targeted to a nucleic acid encoding glycogen synthase kinase 3
 CC alpha. The antisense compound specifically hybridises with and inhibits

CC the expression of glycogen synthase kinase 3 alpha. The antisense
 CC compound is useful for the treatment of a diseases associated with
 CC glycogen synthase kinase 3 alpha such as diabetes, a neurological
 CC disorder, a hematopoietic disorder, a hyperproliferative disorder or a
 CC developmental disorder. The antisense compounds may also be used
 CC prophylactically to prevent or delay infection, inflammation or tumour
 CC formation. The present sequence is a phosphorothioate antisense
 CC oligonucleotide targeted to human glycogen synthase kinase 3 alpha
 CC genomic DNA
 XX
 SQ Sequence 20 BP; 2 A; 8 C; 2 G; 8 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 4871 CTCAGTTCTTCTCTGCAA 4890
 Db 1 CTCAGTTCTTCTCTGCTA 20
 RESULT 853
 AAK95023
 ID AAK95023 standard; DNA; 20 BP.
 XX
 AC AAK95023;
 XX
 DT 06-NOV-2001 (first entry)
 XX
 DE Human cDNA clone-specific primer, SEQ ID NO: 4268.
 XX
 KW Human; full length cDNA; cDNA synthesis; oligo-capping; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN EP130094-A2.
 XX
 PD 05-SEP-2001.
 XX
 PF 07-JUL-2000; 2000EP-00114089.
 XX
 PR 08-JUL-1999; 99JP-00194486.
 PR 11-JAN-2000; 2000JP-00118774.
 PR 02-MAY-2000; 2000JP-00183765.
 XX
 PA (HELI-) HELIX RES INST.
 XX
 PI Ota T, Nishikawa T, Isogai T, Hayashi K, Iehli S, Kawai Y;
 PI Wakamatsu A, Sugiyama T, Nagai K, Kojima S, Otsuki T, Koga H;
 XX
 DR WPI; 2001-524255/58.
 XX
 XX 830 Primers useful for synthesizing full length cDNA clones and their use
 PT in genetic manipulation.
 XX
 PS Example 18; Page 129; 1380pp + Sequence listing; English.
 XX
 CC The invention relates to primers for synthesising full length cDNA
 CC clones. 830 cDNA molecules encoding a human protein have been isolated
 CC and nucleotide sequences of 5'- and 3'-ends of the cDNA molecules have
 CC been determined. Primers for synthesising the full length cDNA are useful
 CC for clarifying the function of the protein encoded by the cDNA. The full
 CC length clones were obtained by construction of full length enriched cDNA
 CC libraries that were synthesised by the oligo-capping method. The primers
 CC enable the production of the full length cDNA easily without any special
 CC methods. The present sequence is a primer used to amplify a human cDNA
 CC clone provided in the invention
 XX
 SQ Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
OY 3593 TTGCTCAGGCTATCTCAAA 3612
DB 1 TTGCCAGGCTAGCTCGAA 20

RESULT 854
AAK95024
ID AAK95024 standard; DNA; 20 BP.
AC AAK95024;
XX
XX
XX 06-NOV-2001 (first entry)
XX
XX Human cDNA clone-specific primer, SEQ ID NO: 4269.
XX
XX Human; full length cDNA; cDNA synthesis; oligo-capping; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX EP1130094-A2.
XX
XX 05-SEP-2001.
XX
XX 07-JUL-2000; 2000EP-00114089.
XX
XX 08-JUL-1999; 99JP-00194486.
XX 11-JAN-2000; 2000JP-00118774.
XX 02-MAY-2000; 2000JP-00183765.
XX
XX (HELT-) HELIX RES INST.
XX
XX Ota T, Nishikawa T, Isogai T, Hayashi K, Ishii S, Kawai Y,
XX Wakamatsu A, Sugiyama T, Nagai K, Kojima S, Otsuki T, Koga H;
XX WPI; 2001-524255/58.
XX
XX 830 Primers useful for synthesizing full length cDNA clones and their use
XX in genetic manipulation.
XX
XX Example 18; Page 129; 1380pp + Sequence Listing; English.
XX
XX The invention relates to primers for synthesizing full length cDNA
XX clones. 830 cDNA molecules encoding a human protein have been isolated
XX and nucleotide sequences of 5'- and 3'-ends of the cDNA molecules have
XX been determined. Primers for synthesizing the full length cDNA are useful
XX for clarifying the function of the protein encoded by the cDNA. The full
XX length clones were obtained by construction of full length enriched cDNA
XX libraries that were synthesized by the oligo-capping method. The primers
XX enable the production of the full length cDNA easily without any special
XX methods. The present sequence is a primer used to amplify a human cDNA
XX clone provided in the invention
XX
XX Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 9.3e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
XX
XX Immunostimulatory oligodeoxynucleotide; immunostimulatory ODN;
XX immunostimulatory DNA-binding protein; nucleolin; hnRNP D; AUF1;
XX hnRNP A1; lupus La protein; functional modifier identification; agonist;
XX antagonist; mimic; inhibitor; drug screening;
XX cellular target identification; oligonucleotide optimization;
XX immunotherapy; ss.
XX
XX Synthetic.
XX
XX WO200067023-A1.
XX
XX 09-NOV-2000.
XX
XX 28-APR-2000; 2000MO-US011697.
XX
XX 29-APR-1999; 99US-0131830P.
XX 03-MAR-2000; 2000US-0186845P.
XX
XX (CPGT-) CPG IMMUNOPHARMACEUTICALS GMBH.
XX (IOMA) UNIT IOMA RES FOUND.
XX
XX Noll BO, Schetter C, Krieg AM;
XX
XX WPI; 2001-016002/02.
XX
XX Immunostimulatory DNA binding proteins to identify immunostimulatory DNA
XX functional modifiers, immunostimulatory DNA binding competitors and to
XX optimize immunostimulatory oligodeoxynucleotides for stimulation.
XX
XX Example 1; Page 45; 95pp; English.
XX
XX The invention relates to the use of an immunostimulatory single-stranded
XX DNA-binding protein in screening assays to identify compounds which bind
XX to it and thereby act as functional modifiers of immunostimulatory
XX oligodeoxynucleotide (ODN) activity. Such modifiers of ODN activity
XX consist of immunostimulatory DNA binding inhibitors, immunostimulatory
XX DNA mimics, and immunostimulatory DNA agonists and antagonists.
XX Immunostimulatory DNA-binding proteins can also be used in screening
XX methods to identify immunostimulatory DNA binding competitors, and to
XX optimize an immunostimulatory ODN for immune stimulation. Isolated
XX complexes of an immunostimulatory DNA-binding protein bound to an
XX immunostimulatory ODN can additionally be used to screen a panel of
XX candidate target molecules to identify the cellular target molecules of
XX the immunostimulatory ODN. The immunostimulatory DNA-binding proteins
XX used in the methods of the invention are the RNA-binding proteins
XX nucleolin, hnRNP D, AUF1, hnRNP A1 and lupus La protein. The screening
XX methods are useful for identifying a compound that inhibits interaction
XX between immunostimulatory DNA and an immunostimulatory DNA-binding
XX protein and for identifying agonists useful in immunotherapy. The complex
XX is useful in screening for immunostimulatory DNA cellular target
XX molecules. The candidate immunostimulatory ODN competitors allow the
XX investigation of structure/activity relationships of immunostimulatory
XX DNA-binding proteins and immunostimulatory ODNs. The present sequence
XX represents an oligonucleotide used in an exemplification of the invention
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 9.3e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

DT 09-MAR-2001 (first entry)
XX Digoxigenin-labelled poly T oligonucleotide, SEQ ID NO:9.
XX
XX Immunostimulatory oligodeoxynucleotide; immunostimulatory ODN;
KW immunostimulatory DNA-binding protein; nucleolin; hnRNP D; AUF1;
KW hnRNP A1; lupus la protein; functional modifier identification; agonist;
KW antagonist; mimic; inhibitor; drug screening;
KW cellular target identification; oligonucleotide optimisation;
KW immunotherapy; ss.
XX
XX Synthetic.
XX
XX WO200067023-A1.
XX
XX 09-NOV-2000.
XX
XX 28-APR-2000; 2000MO-US011697.
XX
XX 29-APR-1999; 99US-0131830P.
XX 03-MAR-2000; 2000US-0186845P.
XX
XX (CPGI-) CPG IMMUNOPHARMACEUTICALS GMBH.
XX (IOWA) UNIV IOWA RES FOUND.
XX
XX Noll BO, Schetter C, Krieg AM;
XX
XX WPI; 2001-016002/02.
XX
XX Immunostimulatory DNA binding proteins to identify immunostimulatory DNA
PT functional modifiers, immunostimulatory DNA binding competitors and to
PT optimize immunostimulatory oligodeoxynucleotides for stimulation.
XX
XX Example 1; Page 45; 95pp; English.
XX
XX The invention relates to the use of an immunostimulatory single-stranded
CC DNA-binding protein in screening assays to identify compounds which bind
CC to it and thereby act as functional modifiers of immunostimulatory
CC oligodeoxynucleotide (ODN) activity. Such modifiers of ODN activity
CC consist of immunostimulatory DNA binding inhibitors, immunostimulatory
CC DNA mimics, and immunostimulatory DNA agonists and antagonists.
CC Immunostimulatory DNA-binding proteins can also be used in screening
CC methods to identify immunostimulatory DNA binding competitors, and to
CC optimize an immunostimulatory ODN for immune stimulation. Isolated
CC complexes of an immunostimulatory DNA-binding protein bound to an
CC immunostimulatory ODN can additionally be used to screen a panel of
CC candidate target molecules to identify the cellular target proteins
CC of the immunostimulatory ODN. The immunostimulatory DNA-binding proteins
CC used in the methods of the invention are the RNA-binding proteins
CC nucleolin, hnRNP D, AUF1, hnRNP A1 and lupus la protein. The screening
CC methods are useful for identifying a compound that inhibits interaction
CC between immunostimulatory DNA and an immunostimulatory DNA-binding
CC protein and for identifying agonists useful in immunotherapy. The complex
CC is useful in screening for immunostimulatory DNA cellular target
CC molecules. The candidate immunostimulatory ODN competitors allow the
CC investigation of structure/activity relationships of immunostimulatory
CC DNA-binding proteins and immunostimulatory ODNs. The present sequence
CC represents an oligonucleotide used in an exemplification of the invention
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAATACAAAAAGAAA 5412
Db 20 AAAAAAAAAAAAAAAAAAAAA 1
RESULT 857
AAC87241/C
ID AAC87241 standard; DNA; 20 BP.

XX AAC87241;
AC 09-MAR-2001 (first entry)
XX
XX Poly T oligonucleotide, SEQ ID NO:20.
DT
XX
XX Immunostimulatory oligodeoxynucleotide; immunostimulatory ODN;
KW immunostimulatory DNA-binding protein; nucleolin; hnRNP D; AUF1;
KW hnRNP A1; lupus la protein; functional modifier identification; agonist;
KW antagonist; mimic; inhibitor; drug screening;
KW cellular target identification; oligonucleotide optimisation;
KW immunotherapy; ss.
XX
XX Synthetic.
XX
XX WO200067023-A1.
XX
XX 09-NOV-2000.
XX
XX 28-APR-2000; 2000MO-US011697.
XX
XX 29-APR-1999; 99US-0131830P.
XX 03-MAR-2000; 2000US-0186845P.
XX
XX (CPGI-) CPG IMMUNOPHARMACEUTICALS GMBH.
XX (IOWA) UNIV IOWA RES FOUND.
XX
XX Noll BO, Schetter C, Krieg AM;
XX
XX WPI; 2001-016002/02.
XX
XX Immunostimulatory DNA binding proteins to identify immunostimulatory DNA
PT functional modifiers, immunostimulatory DNA binding competitors and to
PT optimize immunostimulatory oligodeoxynucleotides for stimulation.
XX
XX Example 1; Page 45; 95pp; English.
XX
XX The invention relates to the use of an immunostimulatory single-stranded
CC DNA-binding protein in screening assays to identify compounds which bind
CC to it and thereby act as functional modifiers of immunostimulatory
CC oligodeoxynucleotide (ODN) activity. Such modifiers of ODN activity
CC consist of immunostimulatory DNA binding inhibitors, immunostimulatory
CC DNA mimics, and immunostimulatory DNA agonists and antagonists.
CC Immunostimulatory DNA-binding proteins can also be used in screening
CC methods to identify immunostimulatory DNA binding competitors, and to
CC optimize an immunostimulatory ODN for immune stimulation. Isolated
CC complexes of an immunostimulatory DNA-binding protein bound to an
CC immunostimulatory ODN can additionally be used to screen a panel of
CC candidate target molecules to identify the cellular target proteins
CC of the immunostimulatory ODN. The immunostimulatory DNA-binding proteins
CC used in the methods of the invention are the RNA-binding proteins
CC nucleolin, hnRNP D, AUF1, hnRNP A1 and lupus la protein. The screening
CC methods are useful for identifying a compound that inhibits interaction
CC between immunostimulatory DNA and an immunostimulatory DNA-binding
CC protein and for identifying agonists useful in immunotherapy. The complex
CC is useful in screening for immunostimulatory ODN cellular target
CC molecules. The candidate immunostimulatory ODN competitors allow the
CC investigation of structure/activity relationships of immunostimulatory
CC DNA-binding proteins and immunostimulatory ODNs. The present sequence
CC represents an oligonucleotide used in an exemplification of the invention
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAATACAAAAAGAAA 5412
Db 20 AAAAAAAAAAAAAAAAAAAAA 1

```
RESULT 858
AAS10402/c
ID AAS10402 standard; DNA; 20 BP.
XX
AC AAS10402;
XX
DT 24-OCT-2001 (first entry)
XX
DE DNA template for 3' end labeling of an RNA molecule, #14.
XX
KM 3' RNA end labeling; DNA template; Okazaki fragment; 5' overhang; ss.
XX
OS Synthetic.
XX
PN US6238865-B1.
XX
PD 29-MAY-2001.
XX
PF 16-OCT-1998; 98US-00173936.
XX
PR 17-OCT-1997; 97US-0063757P.
XX
PA (CHEN/) CHEN G.
PA (HUAN/) HUANG Z.
PA (SZOS/) SZOSTAK J W.
XX
PI Huang Z, Szostak JM;
XX
DR WPI; 2001-366470/38.
XX
PT Modifying a 3' terminus of a pre-selected DNA sequence, useful for
PT labeling and modifying 3'-termini of other nucleic acids, comprises using
PT a synthetic nucleotide template with a defined overhang nucleotide.
XX
PS Example 5; Col 13; 22pp; English.
XX
CC The sequence represents a synthetic DNA template molecule used to
CC demonstrate the method of the invention. The invention relates to a
CC method of modifying (e.g. 3' end labelling with 32P dATP) the 3' terminus
CC of an RNA molecule by providing a DNA oligonucleotide, complementary to
CC the 3' end of the RNA molecule, with an overhang at the 5' end which
CC allows incorporation of the labeling nucleotide into the RNA molecule.
CC The method, based on the synthesis of Okazaki fragments, is useful for
CC labeling and modifying the 3'-termini of other nucleic acids such as DNA
CC fragments. The method is a simple and efficient way of labeling or
CC modifying RNA 3'-termini using DNA polymerase and a synthetic template
CC with defined overhang nucleotides
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 5393 AAAAAATACAAAGAAA 5412
DB 20 AAAAAAAAAAAAAAAAAA 1
RESULT 859
AAD16997/c
ID AAD16997 standard; DNA; 20 BP.
XX
AC AAD16997;
XX
DT 29-NOV-2001 (first entry)
XX
DE Capture probe CPS'.
XX
KM Scaffold protein; antibody mimic; fibronectin type III domain;
KM randomised loop; randomised beta-sheet; diagnostic purpose;
KM protein designing; probe; tenth module of human Fn3; 10Fn3;
KM fibronectin module of type III; Fn3; ss.
XX
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```
XX
OS Unidentified.
XX
PN WO200164942-A1.
XX
PD 07-SEP-2001.
XX
PF 28-FEB-2001; 2001WO-US006414.
XX
PR 29-FEB-2000; 2000US-00515260.
XX
PA (PHYL-) PHYLLOS INC.
XX
PI Lipovsek D, Wagner RW, Kulmelis RG;
XX
DR WPI; 2001-557782/62.
XX
PT Fibronectin scaffold protein array for obtaining a protein/compound which
PT binds to a compound/protein, comprises a fibronectin type III domain
PT having a randomized loop, a randomized beta-sheet or their combination.
XX
PS Disclosure; Page 41; 67pp; English.
XX
CC The present invention relates to an array of proteins (antibody mimics)
CC comprising a fibronectin type III domain having a randomised loop, a
CC randomised beta-sheet, or their combination, and has the capacity to bind
CC to a compound that is not bound by a corresponding naturally-occurring
CC fibronectin, immobilised onto a solid support. The antibody mimics is
CC useful for detecting a compound preferably a protein, in a biological
CC sample. It is also useful to detect one or more different analytes
CC simultaneously in a sample. Hence is useful for diagnostic purposes. It
CC is also useful for the purpose of designing proteins capable of binding
CC to virtually any compound of interest. The present sequence is a capture
CC probe used to self-assemble and anchor the tenth module of human
CC fibronectin module of type III (Fn3) (10Fn3) which is used in an
CC exemplification of the invention
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 5393 AAAAAATACAAAGAAA 5412
DB 20 AAAAAAAAAAAAAAAAAA 1
RESULT 860
AAF60896
ID AAF60896 standard; DNA; 20 BP.
XX
AC AAF60896;
XX
DT 15-MAY-2001 (first entry)
XX
DE Conjugate forming oligonucleotide ONS SEQ ID 5.
XX
KM Transport; membrane; cytosolic; virucide; vasotropic; dermatological;
KM antiparasitic; antiaesthetic; gene therapy; tumor cell; antisense;
KM tumor therapy; drug; phosphodiester linkage; ss.
XX
OS Unidentified.
XX
PN DE19935302-A1.
XX
PD 08-FEB-2001.
XX
PF 28-JUL-1999; 99DE-01035302.
XX
PR 28-JUL-1999; 99DE-01035302.
XX
PA (AVER ) AVENTIS PHARMA DEUT GMBH.
XX
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XX Uhlmann E, Greiner B, Unger E, Gothe G, Schwerdel M;
 PI MPI; 2001-203679/21.
 XX
 DR
 XX
 PT New substituted aryl conjugates of parent molecules, especially
 PT oligonucleotides, having improved transmembrane and intracellular
 PT transport properties, useful as medicaments or diagnostic agents.
 XX
 PS Disclosure; Page 9; 28pp; German.
 XX
 CC This invention describes a novel conjugate (I) which consists of (A) a
 CC molecule to be transported and (B) at least one aryl residue of formula -
 CC Ar-(X-C(Y)-R-1)_n (II). Ar = group containing at least one aromatic ring;
 CC X = O or N (sic); Y = O, S or NH-R-2 (sic); R-1 = optionally substituted
 CC 1-23C alkyl (optionally containing double and/or triple bonds); R-2 =
 CC optionally substituted 1-18C alkyl (optionally containing double and/or
 CC triple bonds); n = integer of 1 or more. (A) is bonded to (B) directly or
 CC via a chemical group, provided that the chemical group is other than CH₂-
 CC -S if the bond is via a phosphodiester linkage of (A). The invention also
 CC describes (I') the preparation of a conjugate (I') of (A') a molecule to
 CC be transported and (B') at least one aryl residue (not restricted to
 CC (II)), by preparing (A') containing a reactive function at the position
 CC at which (B') is to be bonded, preparing (B') and reacting (A') and (B');
 CC and (II) the use of aryl groups (II) (optionally bonded via a chemical
 CC group) for transporting (A) across biological membranes. The products of
 CC the invention have cytostatic, virucide, vasotropic, dermatological,
 CC antiparasitic and antiaschematic activity and can be used for gene
 CC therapy. Conjugation of (A) with (B) is useful for transporting (A)
 CC across biological membranes or into eukaryotic or prokaryotic cells
 CC (specifically bacterial, yeast or mammalian cells, including human cells,
 CC particularly tumor cells). Medicaments, diagnostic agents and test kits
 CC containing (I) are also claimed. Typically (I) are antisense
 CC oligonucleotide derivatives for tumor therapy; oligonucleotide drugs for
 CC treating viral infections or diseases associated with integrins or cell-
 CC cell interactions (e.g. restenosis, vitiligo, psoriasis or asthma); or
 CC labeled oligonucleotides for in vivo diagnostic use, e.g. by in situ
 CC hybridization. Conjugation with (B) markedly improves the cellular uptake
 CC of (A), e.g. in tumor cells. (B) include fluorescein derivative residues,
 CC in which case the conjugates (I) are fluorescently labeled, allowing
 CC microscopic monitoring of cellular uptake etc. The cellular uptake of (I)
 CC is superior to that obtained using other conjugated groups related to
 CC (II); e.g. oligonucleotides conjugated with fluorescein diacetate (within
 CC the scope of (B)) have superior uptake to corresponding fluorescein
 CC conjugates
 CC
 CC
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 5393 AAAAAATACAAAAGAA 5412
 Db 1 AAAAAAAAAAAAAAAAAA 20
 RESULT 861
 AAHS6999
 ID AAHS6999 standard; DNA; 20 BP.
 AC AAHS6999;
 XX
 XX
 DT 10-SBP-2001 (first entry)
 XX
 DE Human oestrogen receptor alpha search PCR primer 24.
 XX
 XX ligand dependent transcriptional factor; oestrogen receptor; ER;
 KM glucocorticoid receptor protein; GR; mineralocorticoid receptor protein;
 KM MR; peroxisome proliferator-activated receptor protein; PPAR;
 KM progesterone receptor protein; PR; progesterone X receptor protein; RXR;
 KM thyroid hormone receptor protein; TR; vitamin D receptor protein; VDR;
 KM transactivation; ERalpha; breast cancer; PCR primer; probe; ss.

XX Homo sapiens.
 OS
 XX
 XX WO200142307-A1.
 PN
 XX
 PD 14-JUN-2001.
 XX
 XX
 PF 01-DEC-2000; 2000MO-JP008553.
 XX
 XX 07-DEC-1999; 99JP-00348022.
 PR 27-DEC-1999; 99JP-00370667.
 PR 07-JUL-2000; 2000JP-00207011.
 PR 21-JUL-2000; 2000JP-00220508.
 PR 02-AUG-2000; 2000JP-00234053.
 PR 03-AUG-2000; 2000JP-00235460.
 PR 03-AUG-2000; 2000JP-00235461.
 PR 03-AUG-2000; 2000JP-00235463.
 XX
 XX (SUMO) SUMITOMO CHEM CO LTD.
 PA
 XX
 XX Saito K, Ohe N, Satoh H;
 PI MPI; 2001-367866/38.
 XX
 DR
 XX
 XX
 PT ligand dependent transcriptional factors, nucleic acids encoding them and
 PT cells comprising them and a specified reporter gene, useful for screening
 PT agents for the treatment of breast cancer.
 XX
 PS Example 8; Page 214; 276pp; English.
 XX
 CC The present invention relates to ligand dependent transcriptional factors
 CC including oestrogen receptor (ER) alpha and beta protein, glucocorticoid
 CC receptor protein (GR), mineralocorticoid receptor protein (MR),
 CC peroxisome proliferator-activated receptor protein (PPAR), progesterone
 CC receptor protein (PR), progesterone X receptor protein (RXR), thyroid hormone
 CC receptor protein (TR) and vitamin D receptor protein (VDR), the nucleic
 CC acids encoding them and cells comprising them and a specified reporter
 CC gene for the ligand dependent transcriptional factor. These proteins are
 CC useful in the modulation of ligand dependent transcriptional factor
 CC activity. The cells, mutant ERalpha and the polynucleotide encoding it
 CC may be used in assays for qualitatively analysing an activity for
 CC transactivation of a reporter gene by a test ERalpha, for screening
 CC mutant ligand dependent transcriptional factors, for evaluating an
 CC activity for transactivation of a reporter gene by a test ERalpha and/or
 CC for screening a compound useful for treating a disorder of a mutant
 CC ERalpha, especially breast cancer
 CC
 CC
 SQ Sequence 20 BP; 6 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2320 ATCATCTCCACCTCTTGA 2339
 Db 1 ATCAGGTCACCTCTTGA 20
 RESULT 862
 AAS63428
 ID AAS63428 standard; DNA; 20 BP.
 AC AAS63428;
 XX
 XX
 DT 29-JAN-2002 (first entry)
 XX
 DE Oligonucleotide-nanoparticle probe #52.
 XX
 XX Oligonucleotide-nanoparticle probe; diagnostic; forensic analysis;
 KM nucleic acid detection; nanostructure; biochip; biofilter; drug delivery;
 KM ss.
 XX
 OS Synthetic.


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XX  MO200173123-A2.
XX  04-OCT-2001.
XX  28-MAR-2001; 2001WO-US010071.
XX  28-MAR-2000; 2000US-0192699P.
XX  26-APR-2000; 2000US-0200161P.
XX  26-JUN-2000; 2000US-00603830.
XX  26-JUN-2000; 2000US-0213906P.
XX  08-DEC-2000; 2000US-0254392P.
XX  11-DEC-2000; 2000US-0255235P.
XX  12-JAN-2001; 2001US-00760500.
XX  28-MAR-2001; 2001US-00820279.
XX  (NANO-) NANOSPHERE INC.
XX  Mirkin CA, Letsinger RL, Mucic RC, Storchhoff JJ, Elghanian R;
XX  Taton TA, Park S, Li Z;
XX  WPI, 2001-656926/75.
XX  Detecting and separating nucleic acid, useful e.g. for diagnosis,
XX  comprises reaction with nanoparticles that carry oligonucleotides
XX  complementary to parts of the target.
XX  Example 18; Page 158; 404pp; English.
XX  The invention relates to a method for detection of nucleic acid (I)
XX  having at least 2 portions, comprising treatment with nanoparticles that
XX  carry oligonucleotides complementary to at least 2 parts of (I), where
XX  detectable change caused by hybridisation of the oligonucleotide to (I)
XX  is observed. The method is used to detect (or to separate) specific (I),
XX  e.g. for diagnosing a wide variety of diseases, sequencing, in forensic
XX  analysis etc., and generally to detect analytes other than (I). The
XX  oligonucleotide-derived nanoparticles are also useful for preparing
XX  nanostructures useful, for example, as biochips, biofilters, mechanical
XX  devices, separation membranes, chemical sensors, in computers, and for
XX  drug delivery. Very stable nanoparticle-oligonucleotide conjugates can be
XX  produced, allowing their direct use (as probes) in polymerase chain
XX  reaction, i.e. they survive multiple heating/cooling cycles so do not
XX  need to be added after amplification. (I) are detected by simple colour
XX  change, without the need for special equipment, making possible rapid
XX  field testing for e.g. pathogens. AAS63374-AAS63448 represent
XX  oligonucleotide-nanoparticle probes, and related sequences, used in the
XX  method of the invention
XX  Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX  Query Match 0.3%; Score 15.2; DB 1; Length 20;
XX  Best Local Similarity 85.0%; Pred. No. 9.3e+02;
XX  Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAATACAAAAAGAA 5412
DB 1 AAAAAAAAAAAAAAAAAA 20
XX
XX  RESULT 863
XX  AAF28481
XX  AAF28481 standard; DNA; 20 BP.
XX  AAF28481;
XX  03-APR-2001 (first entry)
XX  Random oligonucleotide; SEQ ID NO: 53.
XX  Nucleic acid detection; nanoparticle-oligonucleotide conjugate;
XX  disease diagnosis; forensic analysis; DNA sequencing; paternity testing;
XX  cell line authentication; gene therapy; ss.

```

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OS  Synthetic.
XX  MO200100876-A1.
XX  04-JAN-2001.
XX  26-JUN-2000; 2000WO-US017507.
XX  25-JUN-1999; 99US-00344667.
XX  26-APR-2000; 2000US-0200161P.
XX  (MIRK/) MIRKIN C A.
XX  (LETS/) LETSINGER R L.
XX  (MUCI/) MUCIC R C.
XX  (STOR/) STORCHHOFF J J.
XX  (ELGH/) ELGHANIAN R.
XX  (TATO/) TATON T A.
XX  Mirkin CA, Letsinger RL, Mucic RC, Storchhoff JJ, Elghanian R;
XX  Taton TA;
XX  WPI, 2001-061976/07.
XX  Detecting nucleic acid, useful for e.g. diagnosis of diseases, forensics
XX  and DNA sequencing, comprises observing detectable change brought about
XX  by hybridization of nucleic acid with substrate or particle bound
XX  oligonucleotides.
XX  Disclosure; Page 199; 205pp; English.
XX  The present sequence is an oligonucleotide used in a method for detecting
XX  a nucleic acid having at least 2 portions. The method comprises
XX  hybridising the nucleic acid with oligonucleotides, such as the present
XX  sequence, attached to a substrate and/or particle and detecting a change
XX  in colour, conductivity or optical density. The method is useful for the
XX  diagnosis and/or monitoring of diseases, in forensics, in DNA sequencing,
XX  for paternity testing, for cell line authentication and for monitoring
XX  gene therapy. Detecting nucleic acids based upon observing a colour
XX  change is cheap, fast, simple, and does not require specialised or
XX  expensive equipment. The nanoparticle oligonucleotide conjugates remain
XX  stable for at least 6 months. A single base mismatch and as little as 20
XX  femtomoles (fm) of target can be detected using the conjugates
XX  Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX  Query Match 0.3%; Score 15.2; DB 1; Length 20;
XX  Best Local Similarity 85.0%; Pred. No. 9.3e+02;
XX  Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAATACAAAAAGAA 5412
DB 1 AAAAAAAAAAAAAAAAAA 20
XX
XX  RESULT 864
XX  AAS10371
XX  AAS10371 standard; DNA; 20 BP.
XX  AAS10371;
XX  24-OCT-2001 (first entry)
XX  Oligonucleotide-cyclic disulphide linker, d.
XX  Nanoparticle; cyclic disulphide-oligonucleotide; DNA detection;
XX  DNA isolation; genetic disease; bacterial disease; viral disease;
XX  forensic science; paternity testing; gene therapy; ss.
XX  Synthetic.
XX  Key Location/Qualifiers
XX  FT misc_feature 1
XX  FT /tag= a

```

PT /note= "A is covalently linked to a cyclic-disulphide
 FT moiety"
 XX
 XX
 PN WO200151665-A2.
 XX
 PD 19-JUL-2001.
 XX
 PF 12-JAN-2001; 2001WO-US001190.
 XX
 PR 13-JAN-2000; 2000US-0176409P.
 XX 26-APR-2000; 2000US-0200161P.
 PR 26-JUN-2000; 2000US-00603830.
 PR 12-JAN-2001; 2001US-00760500.
 XX
 PA (NANO-) NANOSPHERE INC.
 XX
 PI Mirkin CA, Letsinger RL, Nucic RC, Storhoff JJ, Elghanian R;
 PI Taton TA, Li Z;
 XX
 DR WPI; 2001-451868/48.
 XX
 PT Detecting a nucleic acid useful in e.g. diagnosing genetic, bacterial or
 PT viral diseases, by contacting the nucleic acid with oligonucleotides
 PT attached to nanoparticles and having sequences complementary a portion of
 PT the nucleic acid.
 XX
 PS Example 24; Fig 44; 323pp; English.
 XX
 CC The sequence represents a cyclic disulphide linked oligonucleotide which
 CC may be coupled with colloidal gold particles (nanoparticles) and used to
 CC demonstrate the method of the invention. The invention relates to
 CC isolating or detecting a nucleic acid of interest, in a mixture of
 CC nucleic acids, by binding it to 2 or more complementary nucleotides which
 CC have a nanoparticle attached to their 5' ends. The nanoparticles (e.g.
 CC colloidal gold) are used to both isolate and detect (e.g. by linking the
 CC particle to a fluorescent probe) the resultant complex. The methods are
 CC useful for detecting nucleic acids, natural or synthetic, and modified or
 CC unmodified. The methods may also be applied in the diagnosis of genetic,
 CC bacterial and viral diseases, in forensics, in DNA sequencing, for
 CC paternity testing, for cell line authentication, and for monitoring gene
 CC therapy. The methods are further useful in research and analytical
 CC laboratories in DNA sequencing, in the field to detect the presence of
 CC specific pathogens, for quick identification of an infection to assist in
 CC drug prescription, and in homes and health centres for inexpensive first-
 CC line screening. The methods, which are based on observing colour change
 CC with the naked eye, are cheap, fast, simple, robust (reagents are
 CC stable), do not require specialised or expensive equipment, and little or
 CC no instrumentation is required
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 XX
 QY Query Match 0.3%; Score 15.2; DB 1; Length 20;
 DB Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 5393 AAAAAAAAAATCAAAAGAAA 5412
 DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
 XX
 RESULT 865
 AAF99427/c
 ID AAF99427 standard; DNA; 20 BP.
 XX
 AC AAF99427;
 XX
 DT 12-JUN-2001 (first entry)
 XX
 DE Immunostimulatory nucleic acid #543.
 XX
 KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
 KW immunostimulatory; tumour; viral infection; bacterial infection;
 KW fungal infection; parasitic infection; cancer; asthma;
 KW

KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
 XX
 XX Synthetic.
 OS
 XX
 PN WO200122972-A2.
 XX
 PD 05-APR-2001.
 XX
 PF 25-SEP-2000; 2000WO-US026383.
 XX
 PR 25-SEP-1999; 99US-0156113P.
 XX 27-SEP-1999; 99US-0156135P.
 PR 23-APR-2000; 2000US-0227436P.
 XX
 PA (IOWA) UNIV IOWA RES FOUND.
 XX (COLE-) COLEY PHARM GMBH.
 PA
 PI Krieg AM, Schetter C, Vollmer J;
 XX
 DR WPI; 2001-273485/28.
 XX
 PT Vaccinating against tumors, infectious diseases, allergies and asthma
 PT using immunostimulatory Py-rich and TG nucleic acids.
 XX
 PS Claim 101; Page 49; 338pp; English.
 XX
 CC The present invention relates to a method for stimulating an immune
 CC response. The method comprises administering an immunostimulatory nucleic
 CC acid to a non-rodent subject in sufficient quantity to stimulate an
 CC immune response. The present sequence is one such immunostimulatory
 CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
 CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
 CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
 CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
 CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
 CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
 CC also useful for preventing cancer, asthma, infectious disease, allergy or
 CC immune deficiency. The present sequence can also be used to redirect a
 CC Th2 to a Th1 immune response and to activate immune cells. Note: the
 CC present sequence may have a phosphorothioate backbone
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 XX
 QY Query Match 0.3%; Score 15.2; DB 1; Length 20;
 DB Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 5393 AAAAAAAAAATCAAAAGAAA 5412
 DB 20 AAAAAAAAAAAAAAAAAAAAAA 1
 XX
 RESULT 866
 AAF99099/c
 ID AAF99099 standard; DNA; 20 BP.
 XX
 AC AAF99099;
 XX
 DT 12-JUN-2001 (first entry)
 XX
 DE Immunostimulatory nucleic acid #215.
 XX
 KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
 KW immunostimulatory; tumour; viral infection; bacterial infection;
 KW fungal infection; parasitic infection; cancer; asthma;
 KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
 XX
 OS Synthetic.
 XX
 PN WO200122972-A2.
 XX
 PD 05-APR-2001.
 XX

```
PF 25-SEP-2000; 2000MO-US026383.
XX
XX 25-SEP-1999; 99US-0156113P.
PR 27-SEP-1999; 99US-0156135P.
XX 23-AUG-2000; 2000US-0227436P.
XX
XX (IOWA ) UNIV IOWA RES FOUND.
PA (COLB-) COLBY PHARM GMBH.
XX
XX Krieg AM, Schetter C, Vollmer J;
PI WPI; 2001-273485/28.
XX
XX Vaccinating against tumors, infectious diseases, allergies and asthma
PT using immunostimulatory Py-rich and TG nucleic acids.
XX
XX Claim 101; Page 42; 338pp; English.
XX
XX The present invention relates to a method for stimulating an immune
CC response. The method comprises administering an immunostimulatory nucleic
CC acid to a non-rodent subject in sufficient quantity to stimulate an
CC immune response. The present sequence is one such immunostimulatory
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
CC against tumor antigens, viral antigens (e.g. herpesviridae, retroviridae
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
CC streptococcus), fungal antigens and/or parasitic antigens. The method is
CC also useful for preventing cancer, asthma, infectious disease, allergy or
CC immune deficiency. The present sequence can also be used to redirect a
CC T12 to a Th1 immune response and to activate immune cells. Note: the
CC present sequence may have a phosphorothioate backbone
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAATCAAAAAAAAAAGAAA 5412
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 867
AAF99431
ID AAF99431 standard; DNA; 20 BP.
XX
XX AAF99431;
AC
XX 12-JUN-2001 (first entry)
DT
XX
XX Immunostimulatory nucleic acid #547.
DE
XX
XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KM immunostimulatory; tumour; viral infection; bacterial infection;
KM fungal infection; parasitic infection; cancer; asthma;
KM infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX
XX Synthetic.
OS
XX WO200122972-A2.
PN
XX
XX 05-APR-2001.
PD
XX
XX 25-SEP-2000; 2000MO-US026383.
PF
XX
XX 25-SEP-1999; 99US-0156113P.
PR 27-SEP-1999; 99US-0156135P.
XX 23-AUG-2000; 2000US-0227436P.
XX
XX (IOWA ) UNIV IOWA RES FOUND.
PA (COLB-) COLBY PHARM GMBH.
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XX
XX Krieg AM, Schetter C, Vollmer J;
PI WPI; 2001-273485/28.
XX
XX Vaccinating against tumors, infectious diseases, allergies and asthma
PT using immunostimulatory Py-rich and TG nucleic acids.
XX
XX Claim 101; Page 49; 338pp; English.
XX
XX The present invention relates to a method for stimulating an immune
CC response. The method comprises administering an immunostimulatory nucleic
CC acid to a non-rodent subject in sufficient quantity to stimulate an
CC immune response. The present sequence is one such immunostimulatory
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
CC against tumor antigens, viral antigens (e.g. herpesviridae, retroviridae
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
CC streptococcus), fungal antigens and/or parasitic antigens. The method is
CC also useful for preventing cancer, asthma, infectious disease, allergy or
CC immune deficiency. The present sequence can also be used to redirect a
CC T12 to a Th1 immune response and to activate immune cells. Note: the
CC present sequence may have a phosphorothioate backbone
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAATCAAAAAAAAAAGAAA 5412
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
RESULT 868
AAF99572/c
ID AAF99572 standard; DNA; 20 BP.
XX
XX AAF99572;
AC
XX 12-JUN-2001 (first entry)
DT
XX
XX Immunostimulatory nucleic acid #688.
DE
XX
XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KM immunostimulatory; tumour; viral infection; bacterial infection;
KM fungal infection; parasitic infection; cancer; asthma;
KM infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX
XX Synthetic.
OS
XX WO200122972-A2.
PN
XX
XX 05-APR-2001.
PD
XX
XX 25-SEP-2000; 2000MO-US026383.
PF
XX
XX 25-SEP-1999; 99US-0156113P.
PR 27-SEP-1999; 99US-0156135P.
XX 23-AUG-2000; 2000US-0227436P.
XX
XX (IOWA ) UNIV IOWA RES FOUND.
PA (COLB-) COLBY PHARM GMBH.
XX
XX Krieg AM, Schetter C, Vollmer J;
PI WPI; 2001-273485/28.
XX
XX Vaccinating against tumors, infectious diseases, allergies and asthma
PT using immunostimulatory Py-rich and TG nucleic acids.
```

PS Claim 101; Page 53; 338pp; English.

XX The present invention relates to a method for stimulating an immune

CC response. The method comprises administering an immunostimulatory nucleic

CC acid to a non-rodent subject in sufficient quantity to stimulate an

CC immune response. The present sequence is one such immunostimulatory

CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich

CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects

CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae

CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,

CC haemophilus, campylobacter, clostridium, Escherichia coli and/or

CC staphylococcus), fungal antigens and/or parasitic antigens. The method is

CC also useful for preventing cancer, asthma, infectious disease, allergy or

CC immune deficiency. The present sequence can also be used to redirect a

CC Th2 to a Th1 immune response and to activate immune cells. Note: the

CC present sequence may have a phosphorothioate backbone

XX

SQ Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 9.3e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 5129 AGGAATGAGGAGCATGGA 5148

DB 20 AGGATCAGGAGCGACATGGA 1

RESULT 869

AAH37989

ID AAH37989 standard; DNA; 20 BP.

XX

AC AAH37989;

XX

DT 14-AUG-2001 (first entry)

XX

DE SNP specific upper PCR primer SEQ ID 785.

XX

XX Single nucleotide polymorphism; SNP; single nucleotide primer extension;

KM SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;

KM Leach-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;

KM polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;

KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;

KW inflammation; forensic investigation; paternity analysis; PCR primer; ss.

XX

OS Homo sapiens.

XX

PN WO200129262-A2.

XX

PD 26-APR-2001.

XX

PF 13-OCT-2000; 2000WO-US028436.

XX

PR 15-OCT-1999; 99US-0160096P.

XX

PA (ORCH-) ORCHID BIOSCIENCES INC.

XX

PI Picoult-Newburg L, Pohl M;

XX

DR WPI; 2001-290930/30.

XX

PT New genotyping oligonucleotide, useful for detecting the presence,

PT absence or identity of single polynucleotide polymorphism in a nucleic

PT acid sample.

XX

PS Claim 1; Page 54; 83pp; English.

XX

XX Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide

CC primer extension (SNPE) primers, and the sequences of regions flanking

CC sites of single nucleotide polymorphisms SNPs. The present invention

CC includes kits for determining the presence or absence of a SNP, using the

CC oligonucleotides of the invention. The PCR primers are used to amplify a

CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.

CC The oligonucleotides are useful for genotyping a nucleic acid sample by

CC performing a single-nucleotide primer extension reaction. The

CC oligonucleotides are useful for determining the presence, absence or

CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to

CC assess by association analysis the genotype of an individual or group of

CC individuals, having a pathological phenotypic trait suspected of being

CC caused by one or more SNPs. Phenotypic traits include diseases e.g.

CC agammaglobulinaemia, diabetes insipidus, Leach-Nyhan syndrome, muscular

CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,

CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic

CC traits also include symptoms of or susceptibility to multifactorial

CC disease of which a component is or may be genetic such as autoimmune

CC diseases, including, rheumatoid arthritis, multiple sclerosis,

CC inflammation, cancer, nervous system diseases and infection by pathogenic

CC microorganism. The method is also useful in forensic investigations and

CC paternity analysis. The present sequence represents a PCR primer specific

CC for a human SNP containing DNA sequence

XX

SQ Sequence 20 BP; 1 A; 6 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 9.3e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 284 AGCTGACTTCTTCAGTGTG 303

DB 1 AGCTGCCCTTCTTGCTGTGTC 20

RESULT 870

AAH20526/c

ID AAH20526 standard; DNA; 20 BP.

XX

AC AAH20526;

XX

DT 09-ANG-2001 (first entry)

XX

DE Human MTR1 PCR primer MTR1B1F.

XX

KM MTR1; TRP-receptor protein; Ca2+ regulation; calcium regulation; tumor;

KM transient receptor potential family; BMS; Beckwith-Wiedemann syndrome;

KM lip15.5 abnormality; chromosome 11; anticancer; developmental activity;

KW intracellular calcium ion regulation; hormone; growth factor; apoptosis;

KW cell growth; cell death; cell differentiation; urogenital disease;

KW polycystic kidney disease; calcium influx; Wilms tumor; rhabdoid tumor;

KW rhabdomyosarcoma; PCR primer; ss.

XX

OS Homo sapiens.

XX

PN WO200132693-A2.

XX

PD 10-MAY-2001.

XX

PF 06-NOV-2000; 2000WO-DE003876.

XX

PR 04-NOV-1999; 99DE-01053167.

XX

PA (UYGU-) UNIV GUTENBERG JOHANNES.

XX

PI Prawitt D, Pelletier J, Zabel B;

XX

DR WPI; 2001-316417/33.

XX

PT DNA encoding MTR1 protein, useful e.g. for treating Beckwith-Wiedemann

PT syndrome and tumors, also related proteins and antibodies.

XX

PS Example 1; Page 19; 46pp; German.

XX

XX This invention describes a novel DNA sequence (i) encoding the MTR1

CC protein that: (i) has at least one biological activity of a TRP

CC (transient receptor potential) family protein; (ii) is connected with

CC etiology of BMS (Beckwith-Wiedemann syndrome) and/or (iii) is connected

CC with tumors involving lip15.5 abnormalities. The products of the

CC invention have anticancer and developmental activity. MTR1 is involved in
 CC regulation of intracellular calcium ion levels, which are essential for
 CC cellular responses to hormones and/or growth factors; also in apoptosis
 CC and cell growth, death and differentiation, and in urogenital diseases,
 CC including polycystic kidney disease. (I) and related ribozymes, antisense
 CC RNA, proteins and antibodies (Ab) are used to treat or prevent diseases
 CC associated with altered expression of the MTR1 gene or activity of its
 CC protein, or with calcium influx into cells, e.g. BMS, Wilms tumor.
 CC rhabdoïd tumors and rhabdomyosarcoma. Probes from (I), or Ab, are also
 CC used for diagnosis of such diseases. (II) can also be used for recombinant
 CC production of MTR1 proteins (II) (used for analysis, characterization and
 CC therapy), as tissue or chromosomal markers, for identifying genetic
 CC diseases and related sequences, as primers for genetic fingerprinting, as
 CC source of oligonucleotides for blockips, and to raise anti-protein or
 CC anti-DNA antibodies. (II) are used to raise Ab, as reagents in
 CC competitive assays for (II), as tissue markers; for identifying
 CC interacting proteins and in screening for (ant)agonists. This sequence
 CC represents a PCR primer used in the amplification of the human MTR1 gene
 CC described in the method of the invention

SO Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4585 GTCTTGACAACTGCATCG 4604
 DB 20 GCCTTGACATCTGCATCG 1

RESULT 871

AAH46465/c
 ID AAH46465 standard; DNA; 20 BP.

XX AAH46465;

XX 14-SRP-2001 (first entry)

XX Oligonucleotide #13.

XX Phosphorothioate; anti-viral therapy; stereochemical pathway; ss.

XX Synthetic.

XX Key Location/Qualifiers

XX modified_base 1..20

XX /note= "All bases are phosphorothioate"

XX modified_base 1
 /tag= b
 /mod_base= OTHER
 /note= "Modified with 2'-O-methyl"

XX US6242591-B1.

XX 05-JUN-2001.

XX 11-JAN-2000; 2000US-00481486.

XX 15-OCT-1997; 97US-00950779.

XX (ISIS-) ISIS PHARM INC.

XX Cole DL, Ravikumar VT, Chervallach ZS;

XX WPI, 2001-407218/43.

XX Preparing sulfonated 2' substituted phosphorothioate oligonucleotides

XX useful in biological research, comprises phosphitylating the 5'-hydroxyl

XX of a nucleic acid having a nucleoside with a 2' modification.

PS Example 23; Col 11; 7pp; English.

XX The present invention relates to a method for preparing phosphorothioate
 CC oligonucleotides having at least one nucleoside with a 2' modification.
 CC The method comprises phosphitylating the 5'-hydroxyl of a nucleic acid
 CC group having at least one nucleoside with a 2' modification in an
 CC acetonitrile. The present sequence was used to illustrate the method of
 CC the present invention. The method is useful for synthesizing sulphurised
 CC 2' substituted phosphorothioate oligonucleotides, which may be used in
 CC molecular biological research, in applications such as anti-viral
 CC therapy, and for determining the stereochemical pathways of certain
 CC enzymes which recognise nucleic acids

SO Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAATCAAAAAGAAA 5412
 DB 20 AAAAAAAAAAAAAAAAAA 1

RESULT 872

AAH78547
 ID AAH78547 standard; cDNA; 20 BP.

XX AAH78547;

XX 10-DEC-2001 (first entry)

XX Nucleotide sequence of a cDNA sequence.

XX Nucleic acid identification; DNA library screening; ss.

XX Synthetic.

XX US6274321-B1.

XX 14-AUG-2001.

XX 03-DEC-1999; 99US-00454704.

XX 03-DEC-1999; 99US-00454704.

XX (REGC) UNIV CALIFORNIA.

XX Blumberg B;

XX WPI, 2001-588900/66.

XX Screening nucleic acids (NA) in pool of interest comprises pooling,

XX expressing NA to form expression product pool and identifying NA in NA

XX pool corresponding to expression product pool having interaction with

XX target moiety.

XX Disclosure, Col 22; 19pp; English.

XX The specification describes a method for identifying a nucleic acid in a

XX pool of interest. The method comprises pooling individually identifiable

XX nucleic acids into at least two pools of one nucleic acid each;

XX expressing nucleic acid pools to obtain protein expression product pools;

XX assaying protein expression product pools for products having interaction

XX with target molecule; selecting nucleic acid pools corresponding to

XX identified protein expression product pools; and identifying individual

XX nucleic acids in identified nucleic acid pools. The method is useful for

XX identifying a nucleic acid (e.g. cDNA) in a pool of interest and for

XX functionally screening several nucleic acids. The method is also useful

XX for screening genomic DNA libraries or other source of individual cDNAs,

XX mRNAs, synthetic libraries of nucleic acids e.g. combinatorial libraries.

XX The present sequence was used in the course of the invention

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAACAAAAAGAAA 5412

DB 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 873

AA28351

ID AAF28351 standard; DNA; 20 BP.

XX AAF28351;

DT 02-APR-2001 (first entry)

DE DNA oligomer #1.

XX Deoxynucleic S-Methylthiourae; DNmt; antisense therapy;

KW cardiovascular disease; inflammatory disease; neurocellular disease;

KW antiviral therapy; human immunodeficiency virus; human-cytomegalovirus;

KW influenza; herpes; infection; ss.

XX Unidentified.

XX US6169176-B1.

PD 02-JAN-2001.

XX 28-SEP-1999; 99US-00407675.

PR 02-JUL-1998; 98US-0091481P.

PR 11-DEC-1998; 98US-0111800P.

PR 02-JUL-1999; 99US-00347443.

XX (REGC) UNIV CALIFORNIA.

XX Dev AP, Bruce TC;

XX WPI, 2001-122276/13.

XX

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RESULT 874

AA26069

ID AAH26069 standard; DNA; 20 BP.

XX AAH26069;

DT 05-SEP-2001 (first entry)

DE Human NK-2 gene antisense PCR primer.

XX NK-2; neurokinin receptor; PPT-1; human; preprocrachykinin; cytostratic;

KW analgesic; antiarthritic; antiasthmatic; antidepressant; breast cancer;

KW metastasis; pain; arthritis; aggression; depression;

KW haematopoietic disorder; gene therapy; PCR primer; ss.

XX Homo sapiens.

XX MO200146399-A1.

PN 28-JUN-2001.

XX 23-DEC-2000; 2000WO-US035047.

XX 23-DEC-1999; 99US-0171970P.

XX (UYNE-) UNIV NEW JERSEY MEDICINE & DENTISTRY.

XX Rameshwar P, Gascon P;

XX WPI, 2001-408640/43.

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RESULT 875

AA23343/C

ID AAF23343 standard; DNA; 20 BP.

XX AAF23343;

DT 19-MAR-2001 (first entry)

DE Oligonucleotide for detection of Mycobacterium dermatofaci.

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XX  ITS; internal transcribed spacer region; Mycobacterium fortuitum;
KM Mycobacterium chelonae; Mycobacterium abscessus; Mycobacterium vaccae;
KM Mycobacterium flavescens; Mycobacterium asiaticum; tuberculosis;
KM Mycobacterium porcinum; Mycobacterium acapulcensis; identification;
KM Mycobacterium thermofaciens; PCR primer; probe; detection; ss.
XX  Mycobacterium thermofaciens.
OS  Unidentified.
PN  WO200073436-A1.
XX  07-DEC-2000.
PD  16-MAY-2000; 2000WO-KR000477.
XX  29-MAY-1999; 99KR-00019631.
XX  29-MAY-1999; 99KR-00019632.
XX  29-MAY-1999; 99KR-00019633.
XX  29-MAY-1999; 99KR-00019634.
XX  29-MAY-1999; 99KR-00019635.
XX  07-APR-2000; 2000KR-00018189.
PA  (SJT-) SJ HIGHTECH CO LTD.
PA  (KIMC/) KIM C M.
PA  (PARK/) PARK H K.
XX  Kim CM, Park HK, Jang HJ;
XX  WPI; 2001-061527/07.
XX  Novel oligonucleotide sequences of internal transcribing spacer region of
PT non-tuberculosis mycobacteria (NTM) used as probes or primers for
PT detecting and identifying mycobacteria and distinguish TB complex from
PT NTM.
XX  Claim 36; Page 82; 89pp; English.
XX  The present sequence is an oligonucleotide developed using a
CC Mycobacterium ITS (internal transcribed spacer region) nucleotide
CC sequence. ITS DNA sequences from M. fortuitum, M. chelonae, M. abscessus,
CC M. vaccae, M. flavescens, M. asiaticum, M. porcinum, M. acapulcensis, M.
CC thermofaciens genes were identified. The oligonucleotides derived from
CC these sequences were used to develop PCR primers and hybridisation probes
CC for detection and identification of Mycobacterium. ITS has a more
CC polymorphic region than 16S rRNA and also has a conserved region. It is
CC therefore highly effective as a target DNA for distinction of genotype.
CC The oligonucleotide probes, attached to solid substrate, hybridise only
CC with nucleotide sequences in ITS of specific mycobacteria, and thus they
CC can detect and identify the specific mycobacteria sensitively. The
CC oligonucleotides can also detect and identify the specific mycobacteria
CC by PCR amplification. Using the oligonucleotide primers or probes made
CC from ITS of mycobacteria, it is possible to detect mycobacteria,
CC distinguish tuberculosis (TB) complex from non-tuberculosis mycobacteria
CC (NTM), and to identify mycobacteria species accurately and effectively
XX  Sequence 20 BP; 2 A; 3 C; 9 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1036 GAGTCACCCAGCCGCCAC 1055
DB 20 GAGTCACCCAGCCGCCAC 1

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XX  Beta-actin PCR primer #3 used in invention relating to TMOs.
DE  Primer-dependent polymerase-mediated DNA synthesis; TMO;
XX  template-mimic oligonucleotide; nucleic acid amplification;
KM template-mimic oligonucleotide; nucleic acid amplification;
KM multiplex RT-PCR; reverse transcriptase-PCR; Competimer method; PCR;
KM primer; beta-actin; ss.
XX  Unidentified.
OS  Unidentified.
PN  WO200218616-A1.
XX  07-MAR-2002.
PD  30-AUG-2001; 2001WO-US027287.
XX  01-SEP-2000; 2000US-0230184P.
XX  (HITB ) HITACHI CHEM CO LTD.
XX  (HITB ) HITACHI CHEM R&S CENT INC.
XX  Ke S;
XX  WPI; 2002-315546/35.
XX  Modulating amplification efficiency of a target sequence in primer-
PT dependent polymerase-mediated DNA synthesis, useful for adjusting the
PT efficiency nucleic acid amplification comprises adding a template mimic-
PT oligonucleotide.
XX  Example; Page 11; 39pp; English.
XX  The present invention relates to a method of modulating amplification
CC efficiency of a target sequence in primer-dependent polymerase-mediated
CC DNA synthesis. The method comprises adding a template-mimic
CC oligonucleotide (TMO) to a primer-dependent polymerase-mediated DNA
CC synthesis reaction mixture containing primers, to block a primer for
CC amplifying a target sequence in the mixture from hybridising to the
CC target sequence. The method is useful for adjusting the efficiency of
CC target template nucleic acid amplification by controlling the ratio of
CC template-like oligonucleotides to amplification primers. The new method
CC provides a convenient and efficient method for simultaneous detection of
CC high and low-abundant genes in multiplex RT-PCR, and is more potent and
CC easier to control than the Competimer method. The present sequence
CC represents a PCR primer used in the example of the present invention
XX  Sequence 20 BP; 5 A; 9 C; 3 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1262 GCCTACAGCCCTTACACAC 1281
DB 1 GCCTACAGCCCTTACACAC 20

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RESULT 876
ABK47733 standard; DNA; 20 BP.
ID ABK47733 standard; DNA; 20 BP.
XX AC ABK47733;
XX 18-JUN-2002 (first entry)
DT

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RESULT 877
ABK97573/c
ID ABK97573 standard; DNA; 20 BP.
XX AC ABK97573;
XX 07-OCT-2002 (first entry)
XX Human LCAT gene reverse PCR primer #20.
XX Lactin-cholesterol acyltransferase; LCAT; Norum disease; gene therapy;
KM fish-eye disease; atherosclerotic cardiovascular disease; forensic;
KM population diversity; anthropological lineage; paternity testing; human;
KM polymorphism; PCR; primer; ss.
XX Homo sapiens.
OS

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XX PN WO200253575-A1.
XX XX
XX PD 11-JUL-2002.
XX XX
XX PF 03-JAN-2001; 2001WO-US000092.
XX XX
XX PR 03-JAN-2001; 2001WO-US000092.
XX XX
XX PA (GENA-) GENAISSANCE PHARM INC.
XX XX
XX PI Chew A, Denton RR, Nandabalan K, Stephens JC;
XX XX
XX DR WPI; 2002-557737/59.
XX XX
XX PT Novel isolated polymorphic variant polymnucleotide of lecithin-cholesterol
XX PT acyltransferase gene, useful for studying expression and bioloical
XX PT function of the gene, and for therapeutic, diagnostic or forensic
XX PT purposes.
XX XX
XX PS Example 1; Page 30; 72pp; English.
XX XX
CC The present invention relates to a new polymnucleotide comprising a
CC nucleotide sequence which is a polymorphic variant of a reference
CC sequence for lecithin-cholesterol acyltransferase (LCAT). The invention
CC is useful for identifying an association between a trait (preferably a
CC clinical response to drug targeting LCAT) and at least one genotype or
CC haplotype of LCAT gene. The method of the invention has applicability in
CC developing diagnostic tests and therapeutic treatments for Norm disease,
CC fish-eye disease and atherosclerotic cardiovascular disease. The
CC haplotyping and genotyping methods are useful for studying population
CC diversity, anthropological lineage, the significance of diversity and
CC lineage at the phenotypic level, paternity testing, forensic applications
CC and for identifying association between the LCAT genetic variation and a
CC trait such as level of drug response or susceptibility to disease. In
CC addition, the methods for identifying the LCAT haplotypes present in
CC individuals are useful in the development of drugs targeting LCAT. For
CC example, determining the frequency of individual LCAT haplotypes in a
CC population with a specific disease, e.g. Norm disease, will facilitate
CC the development of drugs targeting the LCAT isoform(s) that are most
CC frequent in that disease population. The present nucleic acid sequence
CC represents one of a collection (ABK97534-ABK97573) of PCR primers that
CC were used in the methods of the invention to detect polymorphisms in the
CC human LCAT gene
CC XX
SQ Sequence 20 BP; 4 A; 9 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 754 GGGCTGAGTCACCTGCGC 773
Db 20 GAGCTGAGTCACCTGCGC 1
RESULT 878
ABN84468/c
ID ABN84468 standard; DNA; 20 BP.
AC ABN84468;
XX
XX 21-OCT-2002 (first entry)
XX
XX Carboxypeptidase A forward PCR primer.
XX
XX Carboxypeptidase; islet of Langerhans; endocrine; stem cell;
XX KW cell differentiation; diabetes; antidiabetic; cell therapy; enzyme; PCR;
XX KW primer; ss.
XX
XX Mus sp.
XX OS
XX PN WO200259278-A2.

```

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XX PD 01-AUG-2002.
XX XX
XX PF 24-JAN-2002; 2002WO-US002361.
XX XX
XX PR 24-JAN-2001; 2001US-0264107P.
XX PR 06-FEB-2001; 2001US-0266917P.
XX PR 18-OCT-2001; 2001US-0344548P.
XX XX
XX PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX XX
XX PI Lumelsky NL, Blondel O, Mc Kay RD, Kim J;
XX XX
XX DR WPI; 2002-599773/64.
XX XX
XX PT Differentiating embryonic stem cells from endocrine cells, for treating a
XX PT pancreatic endocrine disorder, e.g. type I or type II diabetes, comprises
XX PT culturing endocrine cells in an expansion medium containing a growth
XX PT factor.
XX XX
XX PS Example 1; Page 42; 76pp; English.
XX XX
CC The invention provides a method of differentiating embryonic stem cells
CC to endocrine cells. The method involves generating embryoid bodies from a
CC culture of undifferentiated embryonic stem cells, selecting endocrine
CC precursor cells (EPCs), expanding the EPCs by culturing in an expansion
CC medium that comprises a growth factor, and differentiating the expanded
CC EPCs in a differentiation medium. The present sequence is a forward PCR
CC primer for carboxypeptidase A. Use with the primer given in ABN84469
CC generates a product of 521 bp. A primer set (see ABN84454-71) was used in
CC an example of the invention for RT-PCR analysis of endocrine pancreatic
CC gene expression in mouse embryos at stages 1 and 5. The results suggested
CC that the culture conditions used to generate pancreatic endocrine cells
CC supported the differentiation of pancreatic cells. Pancreatic endocrine
CC cells generated in vitro can be used as a model system to study the cells
CC of the islets of Langerhans, to study the kinetics and pharmacology of
CC insulin release, to study agents that affect insulin secretion, and for
CC the development of artificial islet and artificial pancreas tissues for
CC use in the treatment of pancreatic endocrine disorders, particularly type
CC I or type II diabetes
CC XX
SQ Sequence 20 BP; 4 A; 3 C; 6 G; 7 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 2523 GGCATCAACCAACGTTCC 2542
Db 20 GGCATCAACCAACATTTGC 1
RESULT 879
AAD46625/c
ID AAD46625 standard; DNA; 20 BP.
AC AAD46625;
XX
XX 27-JAN-2003 (first entry)
XX
XX Human ABC11 intron20/exon21 junction site.
XX
XX ABC11 protein; paroxysmal kinesigenic choreoathetosis; inflammation;
XX KW cholesterol transport; gene therapy; human; ds.
XX KW
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX FH 1..10
XX FT intron
XX FT /*tag= a
XX FT /number= 1
XX FT /note= "partial"
XX FT exon
XX PN

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PT      /tag= b
PT      /number= 2
PT      /note= "partial"
PN      WO200272632-A2.
PD      19-SEP-2002.
XX      05-MAR-2002; 2002WO-EP003241.
XX      05-MAR-2001; 2001US-0272757P.
XX      05-MAR-2001; 2001US-0272757P.
XX      (AVER ) AVENTIS PHARMA SA.
XX      (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX      Rosier-Montus M, Prades C, Arnould-Reguigne I, Dean M,
XX      Allimets R, Deneffe P;
XX      WPI; 2002-723321/78.
XX      New ABC11 nucleic acids and proteins, useful in manufacturing a
XX      medicament for treating and/or preventing paroxysmal kinesigenic
XX      choreoathetosis, or pathologies linked to the transport of lipophilic
XX      substances.
XX      Disclosure; Page 43; 118pp; English.
XX      The invention relates to novel ABC11 nucleic acids and proteins. ABC11
XX      sequences are used in the manufacture of a medicament for treating and/or
XX      preventing subjects affected by paroxysmal kinesigenic choreoathetosis.
XX      They may be used for treating or preventing subjects affected by a
XX      dysfunction of the transport of anionic drugs such as methotrexate, or
XX      neutral drugs conjugated to acidic ligands such as GSH, glucuronate, or
XX      sulphate conjugated drugs. Compositions comprising the ABC11 polypeptide
XX      may also be used in the treatment and/or prevention of a deficiency in
XX      the transport of cholesterol or inflammatory lipid substances and
XX      diseases mapped on the chromosome locus 16q12. ABC11 protein can be used
XX      to treat pathologies linked to the transport of lipophilic substances.
XX      The invention is used in gene therapy. The present sequence is human
XX      ABC11 intron/exon junction site
XX      Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
SQ
Query Match      0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY      4587 CTTGACCAACTGATGAC 4606
DB      20 CTTGACATCTCTGATGAC 1
RESULT 880
ABS77742/c
ID      ABS77742 standard; DNA; 20 BP.
XX      ABS77742;
AC      13-DEC-2002 (first entry)
XX      13-DEC-2002 (first entry)
DE      Angiogenesis inhibitory oligonucleotide #226.
XX      Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
XX      tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
XX      diabetic retinopathy; retinopathy of prematurity; macular degeneration;
XX      corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
XX      rubecosis; Osler-Weber Syndrome; myocardial angiogenesis;
XX      plaque neovascularisation; telangiectasia; haemophilic joint;
XX      angiodiroma; wound granulation; intestinal adhesion; atherosclerosis;
XX      scleroderma; hypertrophic scar.
XX      Synthetic.
OS
XX

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PN      WO200253141-A2.
XX      11-JUL-2002.
XX      14-DEC-2001; 2001WO-US048458.
XX      14-DEC-2000; 2000US-0255534P.
XX      (COLE-) COLEY PHARM GROUP INC.
XX      Bratzler RL;
XX      WPI; 2002-566690/50.
XX      Inhibiting angiogenesis in a subject, involves administering at least one
XX      antiangiogenic nucleic acid molecule to the subject.
XX      Claim 2; Page 23; 276pp; English.
XX      The invention relates to inhibiting angiogenesis in a subject, comprising
XX      administering at least one antiangiogenic nucleic acid molecule. Also
XX      included is a kit comprising a first container housing the antiangiogenic
XX      nucleic acids, and instructions for administering them to a subject
XX      having a condition characterised by unwanted angiogenesis. The method is
XX      useful for inhibiting angiogenesis associated with solid tumour growth,
XX      tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
XX      diabetic retinopathy, retinopathy of prematurity, macular degeneration,
XX      corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
XX      rubecosis, Osler-Weber Syndrome, myocardial angiogenesis, plaque
XX      neovascularisation, telangiectasia, haemophilic joint, angiodiroma,
XX      wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
XX      hypertrophic scars. The present sequence is an antiangiogenic nucleic
XX      acid of the invention
XX      Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
SQ
Query Match      0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY      5393 AAAAAATGCAAAAGAAA 5412
DB      20 AAAAAAAAAAAAAAAAAAAAA 1
RESULT 891
ABS78072/c
ID      ABS78072 standard; DNA; 20 BP.
XX      ABS78072;
AC      13-DEC-2002 (first entry)
XX      13-DEC-2002 (first entry)
DE      Angiogenesis inhibitory oligonucleotide #556.
XX      Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
XX      tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
XX      diabetic retinopathy; retinopathy of prematurity; macular degeneration;
XX      corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
XX      rubecosis; Osler-Weber Syndrome; myocardial angiogenesis;
XX      plaque neovascularisation; telangiectasia; haemophilic joint;
XX      angiodiroma; wound granulation; intestinal adhesion; atherosclerosis;
XX      scleroderma; hypertrophic scar.
XX      Synthetic.
OS
XX      WO200253141-A2.
XX      11-JUL-2002.
XX      14-DEC-2001; 2001WO-US048458.
XX      14-DEC-2000; 2000US-0255534P.
XX

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XX	(COLF-) COLLEY PHARM GROUP INC.
XX	
XX	Bratzler RL;
XX	
DR	WPI; 2002-566690/60.
XX	
PT	Inhibiting angiogenesis in a subject, involves administering at least one
XX	antiangiogenic nucleic acid molecule to the subject.
XX	
PS	Claim 2; Page 29; 276bp; English.
XX	
CC	The invention relates to inhibiting angiogenesis in a subject, comprising
CC	administering at least one antiangiogenic nucleic acid molecule. Also
CC	included is a kit comprising a first container housing the antiangiogenic
CC	nucleic acids, and instructions for administering them to a subject
CC	having a condition characterised by unwanted angiogenesis. The method is
CC	useful for inhibiting angiogenesis associated with solid tumour growth,
CC	tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
CC	diabetic retinopathy, retinopathy of prematurity, macular degeneration,
CC	corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
CC	rubeosis, Osler-Weber Syndrome, myocardial angiogenesis, plaque
CC	neovascularisation, telangiectasia, haemophilic joints, angiodiroma, and
CC	wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
CC	hypertrophic scars. The present sequence is an antiangiogenic nucleic
CC	acid of the invention
XX	
SQ	Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
	Query Match 0.3%; Score 15.2; DB 1; Length 20;
	Best Local Similarity 85.0%; Pred. No. 9.3e+02;
	Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Oy	5393 AAAAAATACAAAAAGAAA 5412
Db	20 AAAAAAAAAAAAAAAAAAAAA 1
RESULT 882	
ABS78076	
ID	ABS78076 standard; DNA; 20 BP.
AC	
XX	ABS78076;
DT	
XX	13-DEC-2002 (first entry)
DE	
XX	Angiogenesis inhibitory oligonucleotide #560.
KW	
XX	Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
KW	tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
KW	diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW	corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW	rubeosis; Osler-Weber Syndrome; myocardial angiogenesis;
KW	plaque neovascularisation; telangiectasia; haemophilic joint;
KW	angiodiroma; wound granulation; intestinal adhesion; atherosclerosis;
KW	scleroderma; hypertrophic scar.
OS	
XX	Synthetic.
XX	
PN	WO200253141-A2.
XX	
PD	11-JUL-2002.
XX	
XX	14-DEC-2001; 2001WO-US048458.
XX	
XX	14-DEC-2000; 2000US-025534P.
XX	
PA	(COLF-) COLLEY PHARM GROUP INC.
XX	
PI	Bratzler RL;
XX	
XX	WPI; 2002-566690/60.
XX	

[illegible]

CC included is a kit comprising a first container housing the antiangiogenic
CC nucleic acids, and instructions for administering them to a subject
CC having a condition characterised by unwanted angiogenesis. The method is
CC useful for inhibiting angiogenesis associated with solid tumour growth,
CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
CC rubella, Osler-Weber Syndrome, myocardial angiogenesis, plaque
CC neovascularisation, telangiectasia, haemophilic joints, angiodioma,
CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
CC acid of the invention

XX
SQ Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Db 5129 AGGAATGAGGAGCATGGA 5148
20 AGGATCGAGAGCCGACATGGA 1

RESULT 884
ABL39402/C
XX ABL39402 standard, DNA, 20 BP.
XX
AC ABL39402;
XX
DT 16-APR-2002 (first entry)
XX
DE Immunostimulatory nucleic acid SEQ ID NO: 838.
XX
KM Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
KM angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
XX
XX WO200197843-A2.
XX
XX 27-DEC-2001.
XX
XX 22-JUN-2001; 2001WO-US020154.
XX
XX 22-JUN-2000; 2000US-0213346P.
XX
XX (IOWA) UNIV IOWA RES FOUND.
XX
XX Weiner G, Hartmann G;
XX WPI, 2002-154611/20.
XX
XX Treating or preventing cancer, such as basal cell carcinoma, comprises
XX administering immunostimulatory nucleic acids that induce expression of
XX cell surface antigens and antibodies to a subject having or at risk of
XX developing cancer.
XX
XX Disclosure; Page 309; 312pp; English.
XX
XX The present invention relates to methods for treating or preventing
XX cancer, involving administering to a subject having or at risk of
XX developing cancer immunostimulatory nucleic acids that induce expression
XX of cell surface antigens and antibodies. The methods are useful for
XX treating or preventing cancer such as basal cell carcinoma, bladder
XX cancer, bone cancer, brain and central nervous system (CNS) cancer,
XX breast cancer, cervical cancer, colon and rectum cancer, connective
XX tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
XX cancer, leukaemia, liver cancer, Hodgkin's lymphoma, non-
XX Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
XX cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
XX cancer, stomach cancer, testicular cancer, and uterine cancer. The
XX present sequence is an immunostimulatory oligonucleotide described in the
XX exemplification of the invention

XX
SQ Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Db 5129 AGGAATGAGGAGCATGGA 5148
20 AGGATCGAGAGCCGACATGGA 1

RESULT 884
ABL39402/C
XX ABL39402 standard, DNA, 20 BP.
XX
AC ABL39402;
XX
DT 16-APR-2002 (first entry)
XX
DE Immunostimulatory nucleic acid SEQ ID NO: 838.
XX
KM Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
KM angiogenesis; metastasis; cytostatic; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
XX
XX WO200197843-A2.
XX
XX 27-DEC-2001.
XX
XX 22-JUN-2001; 2001WO-US020154.
XX
XX 22-JUN-2000; 2000US-0213346P.
XX
XX (IOWA) UNIV IOWA RES FOUND.
XX
XX Weiner G, Hartmann G;
XX WPI, 2002-154611/20.
XX
XX Treating or preventing cancer, such as basal cell carcinoma, comprises
XX administering immunostimulatory nucleic acids that induce expression of
XX cell surface antigens and antibodies to a subject having or at risk of
XX developing cancer.
XX
XX Disclosure; Page 309; 312pp; English.
XX
XX The present invention relates to methods for treating or preventing
XX cancer, involving administering to a subject having or at risk of
XX developing cancer immunostimulatory nucleic acids that induce expression
XX of cell surface antigens and antibodies. The methods are useful for
XX treating or preventing cancer such as basal cell carcinoma, bladder
XX cancer, bone cancer, brain and central nervous system (CNS) cancer,
XX breast cancer, cervical cancer, colon and rectum cancer, connective
XX tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
XX cancer, leukaemia, liver cancer, Hodgkin's lymphoma, non-
XX Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
XX cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
XX cancer, stomach cancer, testicular cancer, and uterine cancer. The
XX present sequence is an immunostimulatory oligonucleotide described in the
XX exemplification of the invention

XX
SQ Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Db 5129 AGGAATGAGGAGCATGGA 5148
20 AGGATCGAGAGCCGACATGGA 1

RESULT 885
ABL38648
XX ABL38648 standard, DNA, 20 BP.
XX
AC ABL38648;
XX
DT 16-APR-2002 (first entry)
XX
DE Immunostimulatory nucleic acid SEQ ID NO: 2.
XX
KM Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
KM angiogenesis; metastasis; cytostatic; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
XX
XX WO200197843-A2.
XX
XX 27-DEC-2001.
XX
XX 22-JUN-2001; 2001WO-US020154.
XX
XX 22-JUN-2000; 2000US-0213346P.
XX
XX (IOWA) UNIV IOWA RES FOUND.
XX
XX Weiner G, Hartmann G;
XX WPI, 2002-154611/20.
XX
XX Treating or preventing cancer, such as basal cell carcinoma, comprises
XX administering immunostimulatory nucleic acids that induce expression of
XX cell surface antigens and antibodies to a subject having or at risk of
XX developing cancer.
XX
XX Disclosure; Page 95; 312pp; English.
XX
XX The present invention relates to methods for treating or preventing
XX cancer, involving administering to a subject having or at risk of
XX developing cancer immunostimulatory nucleic acids that induce expression
XX of cell surface antigens and antibodies. The methods are useful for
XX treating or preventing cancer such as basal cell carcinoma, bladder
XX cancer, bone cancer, brain and central nervous system (CNS) cancer,
XX breast cancer, cervical cancer, colon and rectum cancer, connective
XX tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
XX cancer, leukaemia, liver cancer, Hodgkin's lymphoma, non-
XX Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
XX cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
XX cancer, stomach cancer, testicular cancer, and uterine cancer. The
XX present sequence is an immunostimulatory oligonucleotide described in the
XX exemplification of the invention

XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 15.2; DB 1; Length 20;

CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
CC present sequence is an immunostimulatory oligonucleotide described in the
CC exemplification of the invention

XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Db 5393 AAAAAATCAAAAAAGAA 5412
20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 885
ABL38648
XX ABL38648 standard, DNA, 20 BP.
XX
AC ABL38648;
XX
DT 16-APR-2002 (first entry)
XX
DE Immunostimulatory nucleic acid SEQ ID NO: 2.
XX
KM Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
KM angiogenesis; metastasis; cytostatic; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
XX
XX WO200197843-A2.
XX
XX 27-DEC-2001.
XX
XX 22-JUN-2001; 2001WO-US020154.
XX
XX 22-JUN-2000; 2000US-0213346P.
XX
XX (IOWA) UNIV IOWA RES FOUND.
XX
XX Weiner G, Hartmann G;
XX WPI, 2002-154611/20.
XX
XX Treating or preventing cancer, such as basal cell carcinoma, comprises
XX administering immunostimulatory nucleic acids that induce expression of
XX cell surface antigens and antibodies to a subject having or at risk of
XX developing cancer.
XX
XX Disclosure; Page 95; 312pp; English.
XX
XX The present invention relates to methods for treating or preventing
XX cancer, involving administering to a subject having or at risk of
XX developing cancer immunostimulatory nucleic acids that induce expression
XX of cell surface antigens and antibodies. The methods are useful for
XX treating or preventing cancer such as basal cell carcinoma, bladder
XX cancer, bone cancer, brain and central nervous system (CNS) cancer,
XX breast cancer, cervical cancer, colon and rectum cancer, connective
XX tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
XX cancer, leukaemia, liver cancer, Hodgkin's lymphoma, non-
XX Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
XX cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
XX cancer, stomach cancer, testicular cancer, and uterine cancer. The
XX present sequence is an immunostimulatory oligonucleotide described in the
XX exemplification of the invention

XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAATACAAAAAGAAA 5412
|||||
DB 1 AAAAAAAAAAAAAAAAAAAAA 20

RESULT 886
ABL39403/c
ID ABL39403 standard; DNA; 20 BP.

AC ABL39403;

DT 16-APR-2002 (first entry)

DE Immunostimulatory nucleic acid SEQ ID NO: 839.

KW Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
KW angiogenesis; metastasis; cytostatic; ss.

OS Synthetic.

PN WO200197843-A2.

PD 27-DEC-2001.

PF 22-JUN-2001; 2001WO-US020154.

PR 22-JUN-2000; 2000US-0213346P.

PA (IOWA) UNIV IOWA RES FOUND.

PI Weiner G, Hartmann G;

WPI; 2002-154611/20.

PT Treating or preventing cancer, such as basal cell carcinoma, comprises administering immunostimulatory nucleic acids that induce expression of cell surface antigens and antibodies to a subject having or at risk of developing cancer.

PS Disclosure; Page 309; 312pp; English.

CC The present invention relates to methods for treating or preventing cancer, involving administering to a subject having or at risk of developing cancer immunostimulatory nucleic acids that induce expression of cell surface antigens and antibodies. The methods are useful for treating or preventing cancer such as basal cell carcinoma, bladder cancer, bone cancer, brain and central nervous system (CNS) cancer, breast cancer, cervical cancer, colon and rectum cancer, connective tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin cancer, stomach cancer, testicular cancer, and uterine cancer. The present sequence is an immunostimulatory oligonucleotide described in the exemplification of the invention

CC Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAATACAAAAAGAAA 5412
|||||
DB 20 AAAAAAAAAAAAAAAAAAAAA 1

RESULT 887

ABL39179/c
ID ABL39179 standard; DNA; 20 BP.

XX ABL39179;

DT 16-APR-2002 (first entry)

DE Immunostimulatory nucleic acid SEQ ID NO: 601.

KW Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
KW angiogenesis; metastasis; cytostatic; ss.

OS Synthetic.

PN WO200197843-A2.

PD 27-DEC-2001.

PF 22-JUN-2001; 2001WO-US020154.

PR 22-JUN-2000; 2000US-0213346P.

PA (IOWA) UNIV IOWA RES FOUND.

PI Weiner G, Hartmann G;

WPI; 2002-154611/20.

PT Treating or preventing cancer, such as basal cell carcinoma, comprises administering immunostimulatory nucleic acids that induce expression of cell surface antigens and antibodies to a subject having or at risk of developing cancer.

PS Disclosure; Page 248; 312pp; English.

CC The present invention relates to methods for treating or preventing cancer, involving administering to a subject having or at risk of developing cancer immunostimulatory nucleic acids that induce expression of cell surface antigens and antibodies. The methods are useful for treating or preventing cancer such as basal cell carcinoma, bladder cancer, bone cancer, brain and central nervous system (CNS) cancer, breast cancer, cervical cancer, colon and rectum cancer, connective tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin cancer, stomach cancer, testicular cancer, and uterine cancer. The present sequence is an immunostimulatory oligonucleotide described in the exemplification of the invention

CC Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5129 AGGATGAGGAGGACATGCA 5148
|||||
DB 20 AGGATGAGGAGGACATGCA 1

RESULT 888

ABL54775/c
ID ABL54775 standard; DNA; 20 BP.

AC ABL54775;

DT 10-JUN-2002 (first entry)

DE CD14 receptor PCR primer SEQ ID NO 9.

KW Angiotensin-I converting enzyme; ACE; CD14; receptor; SNP;
KW single-nucleotide polymorphism; PCR; primer; ss.

OS Synthetic.

```

XX JP200203459-A.
XX
XX 05-FEB-2002.
XX
XX 26-JUL-2000; 2000JP-00225354.
XX
XX 26-JUL-2000; 2000JP-00225354.
XX
XX 26-JUL-2000; 2000JP-00225354.
XX
XX (TOYM ) TOYORO KK.
XX
XX WPI; 2002-275727/32.
XX
XX Detecting 1 base polymorphism on a sequence of a chromosome or it's
XX fragment.
XX
XX Example 2; Page 10; 10pp; Japanese.
XX
XX PS The invention relates to a method for detecting 1 base polymorphism on
XX CC the sequence of a chromosome or its fragment in which a sample nucleic
XX CC acid is reacted with a reaction liquor containing a nucleic acid primer
XX CC having a base adjacent to the polymorphic base at its 3'-end, one
XX CC dideoxynucleotide corresponding to a polymorphic base having a
XX CC distinguishable feature or its mixture, DNA polymerase and a composition
XX CC required for its activity expression to detect the presence of taking
XX CC dideoxynucleotide in the nucleic acid primer and to detect the type of
XX CC the base to be specified. The method is used for detecting 1 base
XX CC polymorphism on the sequence of a chromosome or its fragment. The present
XX CC sequence is that of a PCR primer, useful in examples of the invention
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 9.3e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 5393 AAAAAAAAAACAAAGAAA 5412
XX DB 20 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 889
XX ABE65035
XX ID ABE65035 standard; DNA; 20 BP.
XX
XX ABE65035;
XX
XX 02-JUL-2002 (first entry)
XX
XX DE Nanoparticle-oligonucleotide #55.
XX
XX KW Nanoparticle-oligonucleotide; nanofabrication; nucleic acid detection;
XX 88.
XX
XX Synthetic.
XX
XX WO200218643-A2.
XX
XX 07-MAR-2002.
XX
XX 10-AUG-2001; 2001WO-US025237.
XX
XX 11-AUG-2000; 2000US-0224631P.
XX
XX 08-DEC-2000; 2000US-0254392P.
XX
XX 11-DEC-2000; 2000US-0255235P.
XX
XX 12-JAN-2001; 2001US-00760500.
XX
XX 28-MAR-2001; 2001US-00820279.
XX
XX (NANO-) NANOSPHERE INC.
XX
XX Mitkin CA, Letsinger RL, Mucic RC, Storchoff JU, Bighanian R;
XX Taton TA, Garimella V, Li Z, Park S;
XX

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DR      WPI; 2002-258024/30.
PT      Detecting nucleic acid, useful for diagnosis of genetic, viral or
PR      bacterial disease, comprises hybridizing nanoparticles with attached
PT      oligonucleotides to nucleic acid and detecting change brought about by
PP      hybridization.
XX      Example 18; Page 410; 412pp; English.
XX
XX      The invention relates to a method of detecting a nucleic acid (NA) having
CC      at least 2 portions comprising: (a) providing nanoparticles (NP) with
CC      attached oligonucleotides (OGN), where OGN has a sequence complementary
CC      to the sequence of NA; (b) contacting NA and NP under conditions
CC      effective to allow hybridisation of OGN with NA; and (c) observing a
CC      detectable change brought about by hybridisation of OGN with NA. The
CC      method is useful for detecting a nucleic acid, separating a selected
CC      nucleic acid from others and methods of nanofabrication. Detecting
CC      analytes such as nucleic acids and proteins are useful for the diagnosis
CC      of genetic, bacterial and viral diseases. The OGN-NP conjugates that use
CC      cyclic disulphide linkers improve the sensitivity of diagnostic assays.
CC      In particular assays using OGN-NP conjugates prepared using linkers
CC      comprising a steroid residue attached to a cyclic disulphide have been
CC      found to be approximately 10 times more sensitive than assays employing
CC      conjugates prepared using alkenehiols or acyclic disulphides as the
CC      linker. The OGN-NP conjugates are stable allowing them to be used
CC      directly in PCR solutions. Therefore conjugates added as probes to a DNA
CC      target to be PCR amplified can be carried through the 30 or 40 heating
CC      cooling cycles of the PCR and are still able to detect the amplicons
CC      without opening the tubes and causing contamination. ABR64981-ABR65055
CC      represent nanoparticle-oligonucleotides of the invention
XX
SQ      Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match          0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY      5393 AAAAATACAAAAGAA 5412
DB      1 AAAAAAAAAAAAAA 20
        ||||| | ||||| |||
RESULT 690
ABR65050
ID      ABR65050 standard; DNA; 20 BP.
XX
XX      ABR65050;
AC
XX      02-JUN-2002 (first entry)
DT
XX      Nanoparticle-oligonucleotide #70.
DB
XX      Nanoparticle-oligonucleotide; nanofabrication; nucleic acid detection;
KW      ss.
OS      Synthetic.
XX
XX      WO200218643-A2.
PN
XX      07-MAR-2002.
PD
XX      10-AUG-2001; 2001WO-US025237.
PF
XX      11-AUG-2000; 2000US-0224631P.
PR      08-DEC-2000; 2000US-0254392P.
PR      11-DEC-2000; 2000US-0255235P.
PR      12-JAN-2001; 2001US-00760500.
PR      28-MAR-2001; 2001US-00820279.
XX
XX      (NANO-) NANOSPHERE INC.
XX
XX      Mitkin CA, Letsinger RL, Mucic RC, Storchoff JU, Elghanian R;
PI      Taton TA, Garimella V, Li Z, Park S;

```

XX WPI; 2002-258024/30.
 XX
 DR Detecting nucleic acid, useful for diagnosis of genetic, viral or
 XX bacterial disease, comprises hybridizing nanoparticles with attached
 PT oligonucleotides to nucleic acid and detecting change brought about by
 XX hybridization.
 XX
 PS Example 24; Fig 44; 412pp; English.
 XX
 CC The invention relates to a method of detecting a nucleic acid (NA) having
 CC at least 2 portions comprising: (a) providing nanoparticles (NP) with
 CC attached oligonucleotides (OGN), where OGN has a sequence complementary
 CC to the sequence of NA; (b) contacting NA and NP under conditions
 CC effective to allow hybridisation of OGN with NA; and (c) observing a
 CC detectable change brought about by hybridisation of OGN with NA. The
 CC method is useful for detecting a nucleic acid, separating a selected
 CC nucleic acid from others and methods of nanofabrication. Detecting
 CC analytes such as nucleic acids and proteins are useful for the diagnosis
 CC of genetic, bacterial and viral diseases. The OGN-NP conjugates that use
 CC cyclic disulphide linkers improve the sensitivity of diagnostic assays.
 CC In particular assays using OGN-NP conjugates prepared using linkers
 CC comprising a steroid residue attached to a cyclic disulphide have been
 CC found to be approximately 10 times more sensitive than assays employing
 CC conjugates prepared using alkanethiols or acyclic disulphides as the
 CC linker. The OGN-NP conjugates are stable allowing them to be used
 CC directly in PCR solutions. Therefore conjugates added as probes to a DNA
 CC target to be PCR amplified can be carried through the 30 or 40 heating
 CC cooling cycles of the PCR and are still able to detect the amplicons
 CC without opening the tubes and causing contamination. AAK64981-AAK65055
 CC represent nanoparticle-oligonucleotides of the invention
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 5393 AAAAAAAAAAAAAAAAAA 5412
 Db 1 AAAAAAAAAAAAAAAAAA 20
 RESULT 891
 ABB52459
 ID ABB52459 standard; DNA; 20 BP.
 XX
 AC ABB52459;
 XX
 DT 15-NOV-2002 (first entry)
 XX
 DE Human LINE-1 DNA associated PCR primer #2.
 XX
 KW ss; long interspersed nuclear element; LINE-1; p40; PCR; primer; ORF1;
 KW ORF2; L1; Alzheimer's disease; autoimmune disease; schizophtrenia;
 KW systemic lupus erythematosus; multiple sclerosis; scleroderma;
 KW insulin-dependent diabetes mellitus; rheumatoid arthritis; phemphigus;
 KW psoriasis; autoimmune thyroid disease; polyomyositis; vitiligo;
 KW mixed connective tissue disease; dermatomyositis; Sjogren's syndrome;
 KW pemphigoid; primary biliary cirrhosis; chronic active hepatitis;
 KW Crohn's disease; ulcerative colitis; pernicious anaemia.
 XX
 OS Unidentified.
 XX
 PN MO200262197-A2.
 XX
 PD 15-AUG-2002.
 XX
 PF 19-DEC-2001; 2001WO-US049353.
 XX
 PR 19-DEC-2000; 2000US-0256673P.
 XX
 PA (HOSP-) HOSPITAL FOR SPECIAL SURGERY.

XX Crow MK;
 PI
 XX WPI; 2002-643381/69.
 XX
 DR Identifying a gene involved in a complex disease, e.g. schizophtrenia,
 XX comprises detecting genes having full-length L1 element in their intronic
 PT region or high sequence fidelity to L1 consensus sequence in the 5' or 3'
 XX regulatory region.
 XX
 PS Disclosure; Page 137; 138pp; English.
 XX
 CC The invention relates to identifying a gene involved in a complex disease
 CC comprising identifying genes containing full-length L1 elements in their
 CC intronic region or containing a full length L1 element with high sequence
 CC fidelity to the L1 consensus sequence in their 5' or 3' regulatory region
 CC (L1- long interspersed nuclear element, LINE-1). Also included are (1)
 CC identifying an individual at risk for or suffering from a complex disease
 CC comprising: (a) identifying or detecting the amount of intronic regions of
 CC genes containing full length L1 elements or in 5' or 3' regulatory
 CC regions of genes containing a full length high fidelity consensus L1
 CC sequence of the individual's DNA from a sample; and (b) comparing the
 CC presence of the L1 sequence or its amount in the intronic regions of
 CC genes or the 5' or 3' regulatory regions with a control sample of DNA
 CC from an individual not susceptible to or at risk for or currently
 CC suffering from a complex disease, where the genes identified are involved
 CC in a complex genome; (2) treating or preventing a complex disease by
 CC administering an agent selected from an L1 antisense oligonucleotide, an
 CC antibody directed against L1 mRNA, and an antibody directed against a
 CC protein encoded by an L1 element; (3) identifying an individual at risk
 CC for or suffering from a complex disease, by detecting antibodies or auto
 CC antibodies directed against ribonucleo-protein particles having L1 mRNA
 CC complements, L1 DNA, mRNA or protein products which indicates that the
 CC individual is at risk for or suffering from a complex disease
 CC (Alzheimer's disease, autoimmune diseases, schizophtrenia, systemic lupus
 CC erythematosus, multiple sclerosis, insulin-dependent diabetes mellitus,
 CC rheumatoid arthritis, phemphigus, psoriasis, autoimmune thyroid disease,
 CC scleroderma, mixed connective tissue disease, polyomyositis,
 CC dermatomyositis, Sjogren's syndrome, pemphigoid, vitiligo, primary
 CC biliary cirrhosis, chronic active hepatitis, Crohn's disease, ulcerative
 CC colitis and pernicious anaemia). Detection of the protein products of L1
 CC elements, either ORF1/p40 or ORF2 gene products can be used to indicate
 CC the presence in cells, tissue, or body fluids of potential immune system
 CC triggers that can induce or exacerbate autoimmune disease. The present
 CC sequence is a PCR primer included in the sequence listing but not
 CC referred to anywhere else in the specification
 XX
 SQ Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 3590 ATGTTGCTAGGCTATCTTC 3609
 Db 1 ATGTTGCCAGGCTATCTTC 20
 RESULT 892
 AAL45122/c
 ID AAL45122 standard; DNA; 20 BP.
 XX
 AC AAL45122;
 XX
 DT 24-MAY-2002 (first entry)
 XX
 DE Oligonucleotide synthesis method related DNA #1.
 XX
 DE Oligonucleotide synthesis; polynucleotide array; protecting group;
 KW oxidation; ss.
 XX
 OS Synthetic.
 XX

```
PN  EPI176151-A1.
XX
PD  30-JAN-2002.
XX
XX  27-JUL-2001; 2001EP-00118360.
PF
XX  28-JUL-2000; 2000US-00627249.
PR
XX  (AGIL-) AGILENT TECHNOLOGIES INC.
PA
XX  Dellinger DJ, Perbost MGM, Betley JR, Caruthers M;
PI  WPI; 2002-156732/21.
XX
XX  Synthesis of polynucleotide useful during fabrication of an array
PT  involves coupling nucleoside phosphoramidite and a solid-supported
PT  nucleoside and treating the product with an oxidation/deprotection
PT  composition.
XX
XX  Example 1; Page 15; 36pp; English.
XX
XX  The present invention relates to a method for the synthesis of a
CC  polynucleotide which involves coupling a second nucleoside to a first
CC  nucleoside through a phosphate linkage, where the second nucleoside has a
CC  non-carbonate protecting group protecting a hydroxyl, and exposing the
CC  product to a composition which concurrently oxidizes the phosphate formed
CC  to a phosphate and deprotects the protected hydroxyl of the second
CC  nucleoside. The method is useful for synthesizing the polynucleotides,
CC  for carrying out either 3' to 5' or 5' to 3' synthesis and for
CC  fabricating an addressable array of polynucleotides on a substrate. The
CC  present sequence is an oligonucleotide produced to demonstrate the method
CC  of the invention
XX
SQ  Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX  Query Match 0.3%; Score 15.2; DB 1; Length 20;
XX  Best Local Similarity 85.0%; Pred. No. 9.3e+02;
XX  Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY  5393 AAAAAATACAAAAGAAA 5412
DB  20 AAAAAAAAAAAAAAAAAAAAA 1
XX
XX  RESULT 893
XX  ABO80721
XX  ABO80721 standard; DNA; 20 BP.
XX
XX  ABO80721;
AC
XX  22-NOV-2002 (first entry)
DT
XX
XX  Salmonella toxin gene stn mRNA-binding oligonucleotide #6.
DE
XX  Toxin; invA; stn; primer; ss.
KM
XX
XX  Salmonella sp.
OS
XX  BPI233073-A2.
PN
XX  21-AUG-2002.
PD
XX
XX  17-JAN-2002; 2002EP-00001254.
PF
XX  17-JAN-2001; 2001JP-00009464.
PR
XX  (TOYU ) TOSOH CORP.
PA
XX  Yokoyama A, Ishiguro T;
PI  WPI; 2002-668421/72.
XX
XX  Novel oligonucleotide for detecting Salmonella toxin gene invA or stn
```

```
PT  mRNA, capable of specifically binding to Salmonella toxin gene invA or
PT  stn mRNA.
XX
XX  Claim 2; Page 19; 28pp; English.
PS
XX
XX  The present invention relates to oligonucleotides (ABQ80704-ABQ80732) for
CC  detecting Salmonella toxin genes invA or stn mRNA, which are capable of
CC  specifically binding to Salmonella toxin gene invA or stn mRNA. The
CC  oligonucleotides are useful as primers for amplifying the target RNA
CC  (Salmonella toxin gene invA or stn mRNA or their complementary sequence),
CC  and allow simple, rapid and highly sensitive amplification and detection
CC  of target RNA
XX
XX  Sequence 20 BP; 10 A; 2 C; 5 G; 3 T; 0 U; 0 Other;
SQ
XX
XX  Query Match 0.3%; Score 15.2; DB 1; Length 20;
XX  Best Local Similarity 85.0%; Pred. No. 9.3e+02;
XX  Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY  2122 ATGAGCGGAGGAAAACCT 2141
DB  1 ATGAGCGTAAAGAAAAGCT 20
XX
XX  RESULT 894
XX  ABL36232
XX  ABL36232 standard; DNA; 20 BP.
XX
XX  ABL36232;
AC
XX  08-APR-2002 (first entry)
DT
XX
XX  M tuberculosis rRNA probe SEQ ID NO: 83.
DE
XX
XX  Skin disorder; psoriasis; atopic dermatitis; allergic contact dermatitis;
KM  alopecia areata; skin cancer; Mycobacterium vaccae; melanoma; cytostatic;
KM  antiproliferative; dermatological; antiinflammatory; antiallergic;
KM  Th2 immune response; immunomodulatory; probe; ss.
XX
XX  Mycobacterium tuberculosis.
OS
XX  US6328978-B1.
PN
XX  11-DEC-2001.
PD
XX
XX  02-JUN-1999; 99US-00324542.
PF
XX  23-DEC-1997; 97US-0097080.
PR
XX  (GENE-) GENESIS RES & DEV CORP LTD.
PA
XX  Watson JD, Tan PLJ, Prestidge R;
PI  WPI; 2002-138361/18.
XX
XX  Inhibiting skin inflammation associated with skin disorder e.g.
PT  psoriasis, by administering composition comprising delipidated and
PT  delipolipidated Mycobacterium vaccae cells or Mycobacterium vaccae
PT  culture filtrate.
XX
XX  Example 5; Col 99-100; 116pp; English.
PS
XX
XX  The present invention relates to a method of inhibiting skin inflammation
CC  associated with a skin disorder selected from psoriasis, atopic
CC  dermatitis and allergic contact dermatitis, which involves administering
CC  a composition containing delipidated and delipolipidated Mycobacterium
CC  vaccae cells or M. vaccae culture filtrate. The skin disorder to be
CC  treated may also include alopecia areata, and skin cancers such as basal
CC  cell carcinoma, squamous cell carcinoma and melanoma. The composition
CC  acts by inhibiting the Th2 immune response. The present sequence is a
CC  probe described in the exemplification of the invention
XX
XX  Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
```

Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAAAGAAA 5412
 |||||
 1 AAAAAAAAAAAAAAAAAA 20

Db 1 AAAAAAAAAAAAAAAAAA 20

RESULT 895
 ABZ30599
 ID ABZ30599 standard; DNA; 20 BP.
 AC ABZ30599;
 XX
 XX
 DT 30-JAN-2003 (first entry)
 XX
 DE Candida albicans GRACE strain PCR primer SEQ ID NO 4750.
 XX
 KM Fungus; Yeast; tetracyclin; promoter; GRACE strain; biosynthesis;
 KM signal transduction; DNA replication; cell division; growth;
 KM proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.
 XX
 OS Candida albicans.
 XX
 PN WO200253728-A2.
 XX
 PD 11-JUL-2002.
 XX
 PF 26-DEC-2001; 2001WO-US049486.
 XX
 PR 29-DEC-2000; 2000US-0259128P.
 PR 20-FEB-2001; 2001US-00792024.
 PR 22-AUG-2001; 2001US-0314050P.
 XX
 PA (ELIT-) ELITRA PHARM INC.
 PI Roemer T, Jiang B, Boone C, Bussey H, Ohlsen KL;
 XX
 DR MPI; 2002-566694/60.
 XX
 PT Constructing strains for identifying gene products as effective targets
 PT for therapeutic intervention, by inactivating in the strain one allele of
 PT a gene and placing other allele of the gene under conditional expression.
 XX
 PS Claim 36; SEQ ID NO 4750; 167bp + Sequence Listing; English.

The invention relates to constructing (M1) a strain of diploid fungal cells in which both alleles of a gene are modified, comprising modifying one allele by insertion or replacement by a cassette having an expressible selectable marker and modifying other allele by recombination, of a promoter replacement fragment with a heterologous promoter, so that expression of the second allele is regulated by the promoter. (M1) is useful for constructing a strain of diploid fungal cells in which both alleles of a gene are modified. The diploid fungal cells having both alleles modified are useful for identifying a gene that is essential to the survival or growth of a fungus, a gene that contributes to the virulence and/or pathogenicity of a fungus, a gene that contributes to the resistance of a diploid fungus to an antifungal agent, an antifungal agent that inhibits the growth of a diploid fungus and for identifying a therapeutic agent for treatment of a mammalian disease. (M1) is useful for identifying a compound which modulates the activity of a gene product, preferably enzymatic activity, carbon compound catabolism, biosynthetic, transporter, transcriptional, translational, signal transduction, DNA replication and cell division activity. The method is useful for identifying a compound having the ability to inhibit growth or proliferation of C. albicans cells and for treating infection by C. albicans. The present sequence is that of a PCR primer used in the method of the invention. Note: The sequence data for this patent is not represented in the printed specification but is based on sequence information supplied to Derwent by the European Patent Office

Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;

QY 5070 TCATCTGTTGGCCACACGAG 5089
 |||||
 1 TCTTCTGTTGGCCATTCAG 20

Db 1 TCTTCTGTTGGCCATTCAG 20

RESULT 896
 AAD34368/c
 ID AAD34368 standard; DNA; 20 BP.
 AC AAD34368;
 XX
 XX
 DT 16-JUL-2002 (first entry)
 XX
 DE Human BSMR gene polymorphism detecting PCR primer, LRG23R.
 XX
 KM Human; bone strength and mineralisation regulatory protein; BSMR;
 KM bone strength; mineralisation; ophthalmological; antidiabetic;
 KM bone density regulating transmembrane receptor; prosthetic device;
 KM surgical implant; diabetic retinopathy; hypertensive retinopathy;
 KM therapy; osteoporosis; prematurity; ocular vessel; eye disorder;
 KM osteopathic; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200216553-A2.
 XX
 PD 28-FEB-2002.
 XX
 PF 17-AUG-2001; 2001WO-US041788.
 XX
 PR 18-AUG-2000; 2000US-0226119P.
 PR 22-SEP-2000; 2000US-0234337P.
 PR 13-JUL-2001; 2001US-0304851P.
 XX
 PA (AVER) AVENTIS PHARMA SA.
 PA (HARD) HARVARD COLLEGE.
 PA (UYCA-) UNIV CASE WESTERN RESERVE.
 XX
 PI Warman ML, Gong Y, Olsen BR, Rawadi G, Roman-Roman S;
 XX
 DR MPI; 2002-329694/36.
 XX
 PT Polynucleotide encoding bone strength and mineralisation regulatory
 PT protein useful for diagnosis or therapy of osteoporosis.
 XX
 PS Disclosure; Fig 5; 124bp; English.

The invention relates to bone strength and mineralisation regulatory protein (BSMR) and its corresponding nucleic acid sequence. BSMR DNA is useful for the diagnosis or therapy of osteoporosis and for regulating (increasing) bone strength and mineralisation in a human subject by activating a bone density regulating transmembrane receptor (BSMR protein). An expression vector comprising a promoter that is operably linked to BSMR DNA is useful for modulating bone density and for enhancing bone strength and mineralisation in a mammal cell. Composition comprising a BSMR effector is useful for treating osteoporosis and is useful particularly as a coating for prosthetic devices and surgical implants. BSMR is useful for screening lead pharmaceutical agents as BSMR effectors, which may be used to treat a range of eye disorders such as diabetic retinopathy, hypertensive retinopathy and retinopathy of prematurity, in which normal vascular growth and integrity of ocular vessels is disrupted. The present sequence is a PCR primer used to amplify cDNA and gDNA molecules useful for detecting polymorphic BSMR genes in human

Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 4160 CCCCCTGGAGTCTCTG 4179
 20 CCACCATGAGAGTCTCTG 1

RESULT 897

ABSE4673
 ID ABSE4673 standard; DNA; 20 BP.

AC ABSE4673;

DT 15-NOV-2002 (first entry)

DE Nucleic acid detection method associated polynucleotide #55.

KM Nucleic acid detection method; nanoparticle-oligonucleotide conjugate;

KW nanoparticle; viral RNA detection; bacterial DNA detection;

KM fungal DNA detection; nanoprobe conjugate; ss.

OS Synthetic.

PN WO200246472-A2.

PD 13-JUN-2002.

PF 07-DEC-2001; 2001WO-US046418.

PR 08-DEC-2000; 2000US-0254392P.

PR 08-DEC-2000; 2000US-0254418P.

PR 11-DEC-2000; 2000US-0255235P.

PR 12-JAN-2001; 2001US-00760500.

PR 28-MAR-2001; 2001US-00820279.

PR 09-APR-2001; 2001US-0282640P.

PR 10-AUG-2001; 2001US-00927777.

PA (NANO-) NANOSPHERE INC.

PI Mirkin CA, Letsinger RL, Mucic RC, Storchhoff JF, Elghanian R;

PI Taton TA, Garimella V, Li Z, Park S;

DR WPI; 2002-608256/65.

PT Detecting nucleic acid having two portions, by providing nanoparticles

PT having oligonucleotides attached to it, contacting nucleic acid and

PT nanoparticles to allow hybridization, and observing detectable change.

PS Example 18; Page 437; 442pp; English.

XX The invention describes a method of detecting (M1) a nucleic acid having

XX two portions, involving providing nanoparticles having oligonucleotides

XX attached to it, which has a sequence complementary to sequence of two

XX portions of nucleic acid, contacting nucleic acid and nanoparticles, to

XX allow hybridization of oligonucleotides with two or more portions of

XX nucleic acid, and observing a detectable change brought about by

XX hybridization. (M1), nanoparticles (I), nanoparticle-oligonucleotide

XX conjugates (II) and the aggregate probe are useful for detecting two or

XX more nucleic acids (from a biological source) having at least two

XX portions, such as viral RNA, bacterial or fungal DNA, a gene associated

XX with a disease, synthetic, or structurally-modified natural or synthetic

XX RNA or DNA, or a product of a polymerase chain reaction amplification.

XX (II) is useful for preparing a nanoprobe conjugate for detecting an

XX analyte, and for detecting a nucleic acid bound to an electrode surface.

XX (I) and (II) are useful for fabricating, and for separating a selected

XX nucleic acid having two portions from other nucleic acids. (I), (II) and

XX the aggregate probe are useful for detecting an analyte (especially

XX polyvalent analyte) in a sample. This sequence represents a

XX polynucleotide used to demonstrate the method of the invention

SO Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 5393 AAAAAAAAAAAGAA 5412
 DB 1 AAAAAAAAAAAAAAAAAA 20

RESULT 898

ABSE4688
 ID ABSE4688 standard; DNA; 20 BP.

AC ABSE4688;

DT 15-NOV-2002 (first entry)

DE Nucleic acid detection method associated polynucleotide #70.

KM Nucleic acid detection method; nanoparticle-oligonucleotide conjugate;

KW nanoparticle; viral RNA detection; bacterial DNA detection;

KM fungal DNA detection; nanoprobe conjugate; ss.

OS Synthetic.

PN WO200246472-A2.

PD 13-JUN-2002.

PF 07-DEC-2001; 2001WO-US046418.

PR 08-DEC-2000; 2000US-0254392P.

PR 08-DEC-2000; 2000US-0254418P.

PR 11-DEC-2000; 2000US-0255235P.

PR 12-JAN-2001; 2001US-00760500.

PR 28-MAR-2001; 2001US-00820279.

PR 09-APR-2001; 2001US-0282640P.

PR 10-AUG-2001; 2001US-00927777.

PA (NANO-) NANOSPHERE INC.

PI Mirkin CA, Letsinger RL, Mucic RC, Storchhoff JF, Elghanian R;

PI Taton TA, Garimella V, Li Z, Park S;

DR WPI; 2002-608256/65.

PT Detecting nucleic acid having two portions, by providing nanoparticles

PT having oligonucleotides attached to it, contacting nucleic acid and

PT nanoparticles to allow hybridization, and observing detectable change.

PS Example 24; Fig 44; 442pp; English.

XX The invention describes a method of detecting (M1) a nucleic acid having

XX two portions, involving providing nanoparticles having oligonucleotides

XX attached to it, which has a sequence complementary to sequence of two

XX portions of nucleic acid, contacting nucleic acid and nanoparticles, to

XX allow hybridization of oligonucleotides with two or more portions of

XX nucleic acid, and observing a detectable change brought about by

XX hybridization. (M1), nanoparticles (I), nanoparticle-oligonucleotide

XX conjugates (II) and the aggregate probe are useful for detecting two or

XX more nucleic acids (from a biological source) having at least two

XX portions, such as viral RNA, bacterial or fungal DNA, a gene associated

XX with a disease, synthetic, or structurally-modified natural or synthetic

XX RNA or DNA, or a product of a polymerase chain reaction amplification.

XX (II) is useful for preparing a nanoprobe conjugate for detecting an

XX analyte, and for detecting a nucleic acid bound to an electrode surface.

XX (I) and (II) are useful for fabricating, and for separating a selected

XX nucleic acid having two portions from other nucleic acids. (I), (II) and

XX the aggregate probe are useful for detecting an analyte (especially

XX polyvalent analyte) in a sample. This sequence represents a

```
CC polynucleotide used to demonstrate the method of the invention
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
QY
  5393 AAAAATATCAAAAAGAAA 5412
  |||||
  1 AAAAAAAAAAAAAAAAAAAAA 20
Db

RESULT 899
ABN86365/c
ID ABN86365 standard; DNA; 20 BP.
XX
AC ABN86365;
XX
DT 08-OCT-2002 (first entry)
XX
DE RANTES DNA amplifying primer.
XX
KM Paramyxovirus; infection; RANTES; chemokine; antiviral; CCR1; CCR5;
KW apoptosis; PCR; primer; ss.
XX
OS Synthetic.
XX
PN MO200255019-A2.
XX
PD 18-JUL-2002.
XX
PF 23-OCT-2001; 2001MO-US045244.
XX
PR 24-OCT-2000; 2000US-0243264P.
XX
PA (UNITW ) UNITV WASHINGTON.
PI Holtzman MJ;
XX
DR WPI; 2002-566709/60.
XX
PT Use of RANTES chemokine or an expression system in treatment and
PS diagnosis of paramyxovirus infection, especially in children.
XX
XX Disclosure; Page 8; 19pp; English.
CC The invention relates to the treatment of paramyxovirus infection that
CC involves administration of an active ingredient such as RANTES chemokine
CC (I) or an expression system (II). (I) and (II) are used in the treatment
CC and diagnosis of paramyxoviral infection, especially in children. RANTES
CC chemokine has a significant effect on respiratory infections caused by
CC paramyxovirus. RANTES acts downstream of viral entry and signals through
CC specific CCR1 and/or CCR5 chemokine receptors to interrupt the death
CC pathway of macrophages which have been infected by virus. RANTES not only
CC inhibits apoptosis of infected macrophage but also clears the macrophage
CC of infection. The present sequence represents a PCR primer specific for
CC RANTES
XX
SQ Sequence 20 BP; 5 A; 0 C; 11 G; 4 T; 0 U; 0 Other;
QY
  Query Match 0.3%; Score 15.2; DB 1; Length 20;
  Best Local Similarity 85.0%; Pred. No. 9.3e+02;
  Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Db
  228 CCCTGACCCCTACCCCTCCCT 247
  |||||
  20 CCCTGACCATCATCTCTCCT 1
QY
  228 CCCTGACCCCTACCCCTCCCT 247
  |||||
  20 CCCTGACCATCATCTCTCCT 1
Db

RESULT 900
AAD44814/c
ID AAD44814 standard; DNA; 20 BP.
XX
```

```
XX
AC AAD44814;
XX
DT 13-DEC-2002 (first entry)
XX
DE Human B-raf kinase antisense oligonucleotide ISIS #13744.
XX
KW Human; raf; hyperproliferation; neovascularisation; ocular angiogenesis;
KW therapy; cancer; cytostatic; anti-angiogenic; vascular; ophthalmological;
KW antisense; phosphorothioate backbone; B-raf kinase; ss.
XX
OS Homo sapiens.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
XX
PN US6410518-B1.
XX
PD 25-JUN-2002.
XX
PF 18-FEB-2000; 2000US-00506073.
XX
PR 31-MAY-1994; 94US-00250856.
PR 31-MAY-1995; 95WO-US007111.
PR 26-NOV-1996; 96US-00756806.
PR 07-JUL-1997; 97US-00889882.
PR 06-JUL-1998; 98WO-US013961.
PR 28-AUG-1998; 98US-00143214.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Monia BP;
XX
DR WPI; 2002-597918/64.
XX
PT Treating cancer, angiogenesis or neovascularization by administering
PS antisense oligonucleotides targeted to human raf sequences.
XX
XX Example 18; Col 26; 41pp; English.
XX
PS The present invention relates to novel antisense oligonucleotides which
XX CC are targeted to nucleic acids encoding human raf proteins and capable of
XX CC inhibiting raf expression. The invention also relates to methods of
XX CC inhibiting hyperproliferation of cells which involves contacting the
XX CC hyperproliferating cells with a therapeutically effective amount of an
XX CC oligonucleotide of the invention. The method is useful for treating
XX CC cancer, angiogenesis or neovascularisation, especially ocular
XX CC angiogenesis or neovascularisation. The present DNA sequence is an
XX CC antisense oligonucleotide targeted to human B-raf kinase
XX
SQ Sequence 20 BP; 2 A; 3 C; 1 G; 14 T; 0 U; 0 Other;
QY
  Query Match 0.3%; Score 15.2; DB 1; Length 20;
  Best Local Similarity 85.0%; Pred. No. 9.3e+02;
  Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Db
  5412 AAAATGAAAATTAAGGAAAT 5431
  |||||
  20 AAAAGCAAAATTAATGACCA 1
QY
  5412 AAAATGAAAATTAAGGAAAT 5431
  |||||
  20 AAAAGCAAAATTAATGACCA 1
Db

RESULT 901
AB196122/c
ID AB196122 standard; DNA; 20 BP.
XX
AC AB196122;
XX
DT 16-FEB-2002 (first entry)
XX
```

XX	Capture oligonucleotide zip ID#J3209 oligo #9.
XX	
KM	Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KM	Ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW	infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KX	oncogene; tumour suppressor; human papillomavirus; forensic;
KV	environmental monitoring; food industry; feed industry; ss.
XX	
OS	Synthetic.
XX	
PN	WO200179548-A2.
XX	
PD	25-OCT-2001.
XX	
PF	04-APR-2001; 2001WO-US010958.
XX	
PR	14-APR-2000; 2000US-0197271P.
PA	(CORR) CORNELL RES FOUND INC.
XX	
PI	Barany F, Zilvi M, Gerry NP, Favie R, Kloman R;
XX	
PP	WPI; 2002-03436/04.
XX	
PT	Designing capture oligonucleotide probes for use on a support to which
PT	complementary oligonucleotides hybridize with little mismatch.
XX	
PS	Example 5; Fig 29; 300pp; English.
XX	
CC	The present invention describes a method (M1) for designing capture
CC	oligonucleotide probes (I) for use on a support to which complementary
CC	oligonucleotide probes (II) will hybridise with little mismatch, where
CC	(I) have melting temperatures within a narrow range. The method is useful
CC	for detecting infectious diseases caused by bacterial infectious agents
CC	e.g. Salmonella, listeria monocytogenes and Haemophilus influenza, fungal
CC	infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC	Aspergillus fumigatus, viruses e.g. T-cell lymphocyctotropic virus,
CC	Epsstein-Barr virus and polio virus, and parasitic infectious agents
CC	selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus
CC	medensis. The method is also useful for detecting genetic diseases such
CC	as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC	Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC	involved in DNA amplification, replication, recombination or repair, the
CC	cancer is specifically associated with a gene selected from BRCA1 gene,
CC	p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC	method is also used for environmental monitoring, forensics and the food
CC	and feed industry, detecting compliance scanning (using e.g. a scanning
CC	electron microscope and infrared microscope) the support at the
CC	particular sites and identifying if ligation of the oligonucleotide probe
CC	sees occurred and correlating (using a computer) identified ligation to a
CC	presence or absence of the target nucleotide sequences. AB182074 to
CC	AB197546 represent oligonucleotide sequences used in the exemplification
CC	of the present invention
XX	
SQ	Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;
	Query Match 0.3%; Score 15.2; DB 1; Length 20;
	Best Local Similarity 85.0%; Pred. No. 9.3e+02;
	Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY	
	3392 GGCTGACCGACAAGACTGTG 3411
DB	20 GGCTGTCACAGCAGGCTG 1
RESULT 902	
ABN86937/c	
ID	ABN86937 standard; DNA; 20 BP.
XX	
AC	ABN86937;
XX	
DT	29-JUL-2002 (first entry)
XX	

Human NOV4 reverse PCR primer SEQ ID NO:56.

Human; NOVX; cytosratic; antiarteriosclerotic; cardiovascular; lymphoma; antidiabetic; immunosuppressive; neuroprotective; gene therapy; cancer; cardiomyopathy; atherosclerosis; cell signal processing; diabetes; AIDS; metabolic pathway modulation; neoplastic; neurological disorder; asthma; adenocarcinoma; prostate cancer; uterus cancer; immune response; Crohn's disease; multiple sclerosis; Graft versus host disease; PCR primer; 88.

Homo sapiens.

MO200230974-A2.

18-APR-2002.

12-OCT-2001; 2001WO-US031922.

12-OCT-2000; 2000US-0240113P.

16-OCT-2000; 2000US-0240625P.

16-OCT-2000; 2000US-0240637P.

16-OCT-2000; 2000US-0240648P.

16-OCT-2000; 2000US-0240662P.

16-OCT-2000; 2000US-0240669P.

16-OCT-2000; 2000US-0240703P.

16-OCT-2000; 2000US-0240732P.

16-OCT-2000; 2000US-0241190P.

18-JAN-2001; 2001US-0262455P.

(CURA-) CURAGEN CORP.

(MILL.) MILLET I.

Grosche WM, Alsebrook JP, Lepley DM, Burgess CE, Mishra V, Kekuda R, Li U, Padigara M, Shimkets RA, Zernhusen BD, Spytek KA, Edinger S, Gerlach V, MacDougall J, Stone D, Gunther E, Ellerman K; WPI; 2002-4441172/47.

New NOVX polypeptides and polynucleotides, useful for treating or preventing a NOVX-associated disorder or a pathological state in a subject, particularly a human, e.g. cardiomyopathy, atherosclerosis, cancer or diabetes.

Example 2; Page 178; 227pp; English.

The present invention describes novel human proteins designated NOVX (where X is 1, 2a, 2b, 2c, 2d, 3, 4, 5, 6a, 6b, 7, 8, or 9). NOV1 is a tyrosine-protein kinase 6-like protein; NOV2a-d are keratin 4-like proteins; NOV3 is a collagen-like protein; NOV4 is a cyrstatin B-like protein; NOV5 is a serotonin receptor-like protein; NOV6a and NOV6b are cold inducible glycoprotein 30-like proteins; NOV7 is a matrilin-2-like protein; NOV8 is a leukocyte surface antigen (CD53)-like protein; and NOV9 is a tyrosine kinase-like protein. NOVX sequences have cytosratic, antiarteriosclerotic, cardiovascular, antidiabetic, immunosuppressive and neuroprotective activities, and can be used in gene therapy. The NOVX sequences can be used in therapeutics, particularly for treating, preventing or alleviating a NOVX-associated disorder or a pathological state in a subject, particularly a human. These disorders include cardiomyopathy, atherosclerosis, a disorder related to cell signal processing and metabolic pathway modulation or diabetes. The NOVX sequences are also useful for determining the presence of or predisposition to a disease associated with altered levels of NOVX polypeptide or nucleic acid, particularly cancer. The NOVX sequences are especially useful in therapeutic or prophylactic applications for neoplastic or neurological disorders, and in the treatment of adenocarcinoma, lymphoma, prostate cancer, uterus cancer, immune response, AIDS, asthma, Crohn's disease, multiple sclerosis or Graft versus host disease. The present sequence represents a PCR primer for human NOV4, which is used in an example from the present invention

Sequence 20 BP; 3 A; 3 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.3%, Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4816 ATCAACACGAGCCCTGACC 4835
DB 20 ATGAAAAACAAGCCCTGACC 1

RESULT 903
ABN87103/c
ID ABN87103 standard; DNA; 20 BP.

AC ABN87103;

DT 30-JUL-2002 (first entry)

DE Capture probe CP5' SEQ ID NO:23.

XX Protein scaffold; antibody; binding protein; immunoglobulin;

KW tumour necrosis factor alpha; TNF-alpha; protein framework; probe; ss.

OS Synthetic.

PN MO200232925-A2.

PD 25-APR-2002.

PF 16-OCT-2001; 2001MO-US032233.

PR 16-OCT-2000; 2000US-00688566.

PA (PHYL-) PHYLLOS INC.

PI Lipovsek D, Wagner RW, Kuimelis RG;

DR WPI; 2002-444238/47.

PT New non-antibody proteins having an immunoglobulin fold, useful in
PT research, therapeutic or diagnostic fields, particularly as scaffolds for
PT designing proteins with specific properties, e.g. for binding any antigen
PT of interest.

PS Disclosure; Page 58; 94pp; English.

XX The present invention describes a non-antibody protein, comprising a
CC domain having an immunoglobulin-like fold, derived from a reference
CC protein having a mutated amino acid sequence, where the non-antibody
CC protein binds with a Kd at least as tight as 10 nM to a compound that is
CC not bound as tightly by the reference protein. The non-antibody protein
CC is useful as scaffolds for selecting or designing a protein framework
CC with specific and favourable properties, e.g. for binding any antigen of
CC interest, or for destroying or inactivating antibody molecules. The non-
CC antibody protein is also useful in all areas where antibodies are used,
CC e.g. research, therapeutic or diagnostic fields, and for screening novel
CC binding proteins useful in the above-mentioned fields. The present
CC proteins have thermodynamic properties superior to those of natural
CC antibodies, and can be evolved rapidly in vitro. The present proteins or
CC antibody mimics exhibit improved biophysical properties, such as
CC stability under reducing conditions and solubility at high
CC concentrations. In addition, these molecules are readily expressed and
CC folded in prokaryotic systems (e.g. Escherichia coli), in eukaryotic
CC systems (e.g. yeast), or in in vitro translation systems (e.g. rabbit
CC reticulocyte lysate system). Furthermore, these proteins are extremely
CC amenable to affinity maturation techniques involving multiple cycles of
CC selection, e.g. in vitro selection using RNA-protein fusion technology,
CC phage display or yeast display systems. The present sequence is used in
CC the exemplification of the present invention

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAATGCAAAAAAGAAA 5412
DB 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 904
AAD41716/c
ID AAD41716 standard; DNA; 20 BP.

AC AAD41716;

DT 30-OCT-2002 (first entry)

DE Human IL-12 p35 subunit DNA antisense oligonucleotide ISIS #139026.

XX Human; interleukin-12; IL-12 p35 subunit; therapeutic; infection; tumour;

KW inflammation; antisense therapy; antisense; phosphorothioate backbone;

XX propylthiatic; ss.

OS Homo sapiens.

PN Synthetic.

PD Key

PF modified_base

FT 1.20

FT /tag= a

FT /mod_base= OTHER

FT /note= "Phosphorothioate backbone"

FT modified_base

FT 1.5

FT /tag= b

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl (MOE) residues"

FT modified_base

FT 1

FT /tag= d

FT /mod_base= m5c

FT modified_base

FT 12.13

FT /tag= e

FT /mod_base= m5c

FT modified_base

FT 15

FT /tag= f

FT /mod_base= m5c

FT modified_base

FT 16.20

FT /tag= c

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl (MOE) residues"

FT modified_base

FT 19

FT /tag= g

FT /mod_base= m5c

FT US6399379-B1.

PN 04-JUN-2002.

PD 07-MAY-2001; 2001US-00851520.

PF 07-MAY-2001; 2001US-00851520.

PR 07-MAY-2001; 2001US-00851520.

XX (ISIS-) ISIS PHARM INC.

PA Baker BF, Freier SM;

PI WPI; 2002-535980/57.

DR Novel antisense compounds targeted to nucleic acids encoding interleukin-12 p35 subunit, useful for modulating interleukin-12 p35 subunit expression and treating diseases associated with expression of the subunit in humans.

XX Claim 3; Col 49-50; 44pp; English.

PS The present invention relates to novel antisense oligonucleotides which

XX specifically hybridise with specific regions of nucleic acids encoding

CC interleukin-12 (IL-12) p35 subunit and inhibit the expression of human IL

CC	-12 p35 subunit. Sequences of the invention are useful for inhibiting the
CC	expression of human IL-12 p35 subunit in human cells or tissues and for
CC	treating animals, particularly humans suspected of having or being prone
CC	to diseases or conditions associated with expression of IL-12 p35
CC	subunit. They are useful for diagnostics, therapeutics and as research
CC	reagent, e.g. prophylactically to prevent or delay infection, tumor
CC	formation or inflammation. Sequences of the invention are useful for
CC	antisense therapy. The present sequence is an antisense oligonucleotide
CC	targeted to human IL-12 p35 subunit DNA. This sequence is used in the
CC	exemplification of the invention
CC	
XX	Sequence 20 BP; 6 A; 5 C; 2 G; 7 T; 0 U; 0 Other;
SO	
QY	Query Match 0.3%; Score 15.2; DB 1; Length 20;
	Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Db	Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0
QY	2750 TGTGTGTAACAACAGCATG 2769
Db	20 TGTGTGTAACAACAGCATG 1
RESULT 905	
ACA63945/c	
ID	ACA63945 standard; DNA; 20 BP.
XX	
AC	ACA63945;
XX	
DT	16-JUN-2003 (first entry)
XX	
DE	Novel human secreted and transmembrane protein related primer #37.
XX	
KM	Human, secreted and transmembrane protein; PRO; antiinflammatory;
KM	antiarteriosclerotic; cardiact; anti-infectility; anti-HIV; cytostatic;
KM	antidiabetic; gene therapy; inflammatory disease; organ failure;
KM	atherosclerosis; cardiac injury; infectility; birth defect;
KM	premature aging; AIDS; cancer; diabetic complication; chromosome mapping;
KM	gene mapping; pharmaceutical; diagnostic; biosensor; bioreactor;
XX	tissue typing; PCR; primer; ss.
XX	
OS	Homo sapiens.
XX	
PN	US2002192706-A1.
XX	
PD	19-DEC-2002.
XX	
PF	24-OCT-2001; 2001US-00999832.
XX	
PR	17-OCT-1997; 97US-0062250P.
PR	03-NOV-1997; 97US-0064249P.
PR	13-NOV-1997; 97US-0065311P.
PR	21-NOV-1997; 97US-0066364P.
PR	10-MAR-1998; 98US-0077450P.
PR	11-MAR-1998; 98US-0077632P.
PR	11-MAR-1998; 98US-0077641P.
PR	11-MAR-1998; 98US-0077649P.
PR	12-MAR-1998; 98US-0077791P.
PR	13-MAR-1998; 98US-0078004P.
PR	17-MAR-1998; 98US-00040220.
PR	20-MAR-1998; 98US-0078886P.
PR	20-MAR-1998; 98US-0078910P.
PR	20-MAR-1998; 98US-0078936P.
PR	20-MAR-1998; 98US-0078939P.
PR	25-MAR-1998; 98US-0079294P.
PR	26-MAR-1998; 98US-0079655P.
PR	27-MAR-1998; 98US-0079663P.
PR	27-MAR-1998; 98US-0079664P.
PR	27-MAR-1998; 98US-0079689P.
PR	27-MAR-1998; 98US-0079728P.
PR	27-MAR-1998; 98US-0079786P.
PR	30-MAR-1998; 98US-0079820P.
PR	30-MAR-1998; 98US-0079823P.
PR	31-MAR-1998; 98US-0080105P.

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XX PR 31-MAR-1998; 98US-0080107D;
XX PR 31-MAR-1998; 98US-0080165P;
XX PR 31-MAR-1998; 98US-0080194P;
XX PR 01-APR-1998; 98US-0080327F;
XX PR 01-APR-1998; 98US-0080328P;
XX PR 01-APR-1998; 98US-0080333P;
XX PR 01-APR-1998; 98US-0080334P;
XX PR 08-APR-1998; 98US-0081049P;
XX PR 08-APR-1998; 98US-0081070P;
XX PR 08-APR-1998; 98US-0081071P;
XX PR 09-APR-1998; 98US-0081195P;
XX PR 09-APR-1998; 98US-0081203P;
XX PR 09-APR-1998; 98US-0081229P;
XX PR 15-APR-1998; 98US-0081817P;
XX PR 15-APR-1998; 98US-0081819P;
XX PR 15-APR-1998; 98US-0081838P;
XX PR 15-APR-1998; 98US-0081952P;
XX PR 15-APR-1998; 98US-0081955P;
XX PR 21-APR-1998; 98US-0082568P;
XX PR 21-APR-1998; 98US-0082569P;
XX PR 22-APR-1998; 98US-0082700P;
XX PR 22-APR-1998; 98US-0082704P;
XX PR 22-APR-1998; 98US-0082819P;
XX PR 22-APR-1998; 98US-0082979P;
XX PR 22-APR-1998; 98US-0082804P;
XX PR 23-APR-1998; 98US-0082796P;
XX PR 07-OCT-1998; 98WC-US02114L;
XX PR 20-NOV-1998; 98WC-US02485S;
XX PR 05-JAN-1999; 99WC-US000106;
XX PR 08-MAR-1999; 99WC-US005028;
XX PR 10-MAR-1999; 99WC-US005190;
XX PR 14-MAY-1999; 99WC-US010733;
XX PR 02-JUN-1999; 99WC-US01225S;
XX PR 30-NOV-1999; 99WC-US02831L;
XX PR 02-DEC-1999; 99WC-US02851L;
XX PR 02-DEC-1999; 99WC-US02856S;
XX PR 16-DEC-1999; 99WC-US03009S;
XX PR 30-DEC-1999; 99WC-US03124J;
XX PR 30-DEC-1999; 99WC-US03127F;
XX PR 05-JAN-2000; 2000WC-US000219;
XX PR 06-JAN-2000; 2000WC-US000277;
XX PR 06-JAN-2000; 2000WC-US000376;
XX PR 11-FEB-2000; 2000WC-US00356S;
XX PR 18-FEB-2000; 2000WC-US00434L;
XX PR 24-FEB-2000; 2000WC-US00504L;
XX PR 02-MAR-2000; 2000WC-US00584L;
XX PR 10-MAR-2000; 2000WC-US006319;
XX PR 21-MAR-2000; 2000WC-US007533;
XX PR 30-MAR-2000; 2000WC-US008439;
XX PR 17-MAY-2000; 2000WC-US01370S;
XX PR 22-MAY-2000; 2000WC-US01404Z;
XX PR 30-MAY-2000; 2000WC-US01494L;
XX PR 02-JUN-2000; 2000WC-US015264;
XX PR 08-JUN-2000; 2000WC-US020710;
XX PR 24-AUG-2000; 2000WC-US023328;
XX PR 01-DEC-2000; 2000WC-US032678;
XX PR 20-DEC-2000; 2000WC-US03495S;
XX PR 28-FEB-2001; 2001WC-US00952S;
XX PR 22-MAR-2001; 2001WC-US009552;
XX PR 25-MAY-2001; 2001WC-US01709P;
XX PR 01-JUN-2001; 2001WC-US017800;
XX PR 20-JUN-2001; 2001WC-US01869Z;
XX PR 29-JUN-2001; 2001WC-US021066;
XX PR 09-JUL-2001; 2001WC-US02173S;
XX
XX (GETH ) GENENTECH INC.
XX
XX Ashkenazi AJ, Baker KP, Botstein D, Desnovers L, Eaton DL;
XX Ferrara N, Filvarcoff E, Fong S, Gao W, Garber H, Gerritsen ME;
XX Giodard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
XX Kijavini IJ, Kuo SS, Napier MA, Pan J, Peoni NF, Roy MA, Shelton DL;
XX Stewart TA, Tumas D, Williams PM, Wood WT;
XX
XX WPI; 2003-32860/31.

```

XX New secreted and transmembrane nucleic acids and polypeptides, designated
PT as PRO, useful for treating inflammation, organ failure, atherosclerosis,
PT cardiac injury, infertility, birth defects, premature aging, AIDS, or
PT cancer.
XX
PS Example 114; Page 187; 453pp; English.
XX
CC The invention describes an isolated nucleic acid (I) comprising, or which
CC is at least 80 % sequence identity to, or the full-length coding sequence
CC of, any of 118 300-2100 nucleotide sequences, which encodes its
CC corresponding PRO polypeptide selected from 118 100-700 amino acid
CC sequences, all given in the specification. The nucleic acids and
CC polypeptides are useful for treating inflammatory diseases, organ
CC failure, atherosclerosis, cardiac injury, infertility, birth defects,
CC premature aging, AIDS, cancer, or diabetic complications. The nucleic
CC acids are useful as hybridisation probes, in chromosome and gene mapping,
CC and in generating antisense RNA or DNA. The polypeptides are useful as
CC pharmaceuticals, diagnostics, biosensors or bioreactors. Both are useful
CC in tissue typing. This sequence represents a novel human secreted and
CC transmembrane PRO polypeptide associated primer
XX
SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5196 TCAGCTGGAGGCCACGCTG 5215
DB 20 TCAGCTGTAAGGCCACGCTG 1
RESULT 906
ADA44747/C
ID ADA44747 standard; DNA; 20 BP.
XX
AC ADA44747;
XX
DT 20-NOV-2003 (first entry)
XX
DE Antisense oligonucleotide #ISIS 115419 #SEQ ID 45.
XX
XX Antisense oligonucleotide; cytostatic; immunosuppressive;
XX antiinflammatory; gene therapy; hyperproliferative disorder; cancer;
XX autoimmune; inflammatory disorder; inhibitor-kappa B kinase-gamma; ss;
XX human.
XX Homo sapiens.
OS
XX
FH Key Location/Qualifiers
FT 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "Phosphorothioate linkages, all cytosines are 5-
FT methylcytosine"
FT 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
PN WO2003031576-A2.
XX
PD 17-APR-2003.
XX
XX 03-OCT-2002; 2002WO-US031809.
XX
XX 06-OCT-2001; 2001US-00972607.
XX

PA (ISIS-) ISIS PHARM INC.
XX
XX Montla BP, Wyatt JR;
XX
DR WPI; 2003-457242/43.
XX
PT New compound having sequence targeted to nucleic acid encoding inhibitor-
PT kappa B kinase-gamma, useful for preparing composition for treating e.g.,
PT cancer, or inflammatory or autoimmune disorder.
XX
PS Claim 3; Page 77; 106pp; English.
XX
XX The invention relates to an antisense compound that is targeted to a
XX nucleic acid encoding inhibitor-kappa B kinase-gamma, specifically
XX hybridising to the nucleic acid encoding inhibitor-kappa B kinase-gamma
XX and inhibiting its expression. Compounds of the invention are antisense
XX oligonucleotides comprising at least one modified internucleoside
XX linkage, which is a phosphorothioate linkage, at least one modified sugar
XX moiety, which is a 2'-O-methoxyethyl sugar moiety, or at least one
XX modified nucleobase, which is a chimeric cytosine. Preferably, the
XX antisense oligonucleotide is a chimeric oligonucleotide. The compound of
XX the invention is useful for preparing a composition for treating a
XX hyperproliferative disorder e.g., cancer, or an autoimmune or
XX inflammatory disorder. The methods are useful for inhibiting the
XX expression of inhibitor-kappa B kinase-gamma in cells or tissues, and
XX treating an animal having a disease or condition associated with
XX inhibitor-kappa B kinase-gamma. Sequences given in ADA44713-ADA44790
XX represent antisense oligonucleotides for the inhibition of human
XX inhibitor-kappa B kinase-gamma mRNA levels.
XX
SQ Sequence 20 BP; 4 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5000 AGGTGGCTTAACGACATCTC 5019
DB 20 AGGTGGCTTATCACCGACTC 1
RESULT 907
AAL61645
ID AAL61645 standard; DNA; 20 BP.
XX
AC AAL61645;
XX
DT 22-SEP-2003 (first entry)
XX
XX Thiol-modified oligo #4 used in the nucleic acid detection method.
XX
XX Nucleic acid detection; fabrication; ss.
XX
OS Unidentified.
XX
PN WO2003035829-A2.
XX
PD 01-MAY-2003.
XX
XX 08-OCT-2002; 2002WO-US032088.
XX
XX 09-OCT-2001; 2001US-0327864P.
XX
XX 07-DEC-2001; 2001US-00008978.
XX
PA (NANO-) NANOSPHERE INC.
XX
XX Park S, Taton TA, Mirkin CA;
XX
XX WPI; 2003-430409/40.
XX
PT Detecting nucleic acid having two portions, by providing nanoparticles
PT having oligonucleotides attached to it, contacting nucleic acid and
PT nanoparticles to allow hybridization, and observing detectable change.
PT

```
XX
PS Example 18; Page 179; 467pp; English.
CC
XX The invention relates to a method of detecting a nucleic acid having two
CC portions. The method involves providing nanoparticles having
CC oligonucleotides attached to it which has a sequence complementary to
CC sequence of two portions of nucleic acid, contacting nucleic acid and
CC nanoparticles to allow hybridisation of oligonucleotides with two or more
CC portions of nucleic acid and observing a detectable change brought about
CC by hybridisation. The method and aggregate probes are useful for
CC detecting two or more nucleic acids (from a biological source) having at
CC least two portions such as viral RNA, bacterial or fungal DNA, a gene
CC associated with a disease, synthetic or structurally modified natural or
CC synthetic RNA or DNA, or a product of a polymerase chain reaction
CC amplification. The invention is useful for preparing a nanoprobe
CC conjugate for detecting an analyte and for detecting a nucleic acid bound
CC to an electrode surface. It is also useful for fabrication and for
CC separating a selected nucleic acid having two portions from other nucleic
CC acids. The present sequence is an oligo used to illustrate the method of
CC the invention
XX
SQ Sequence 20 BP, 20 A, 0 C, 0 G, 0 T, 0 U, 0 Other;
XX
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAACAAAGAAA 5412
Db 1 AAAAAAAAAAAAAAAAAAAAA 20
XX
RESULT 908
AAL61472/c
ID AAL61472 standard; DNA; 20 BP.
XX
AC AAL61472;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human ATRP3 antisense oligonucleotide, ISIS 185455.
XX
KM Human activating transcription factor 3; ATRP3; ischaemia; diabetes;
KW liver regeneration factor-1; LRF-1; antisense therapy; CRG-5; LRG-21;
XX
XX T1-241; phosphorothioate backbone; antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2-methoxyethyl nucleotides"
FT 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2-methoxyethyl nucleotides"
XX
XX WO2003040161-A2.
XX
XX 15-MAY-2003.
XX
XX 04-NOV-2002; 2002KO-US035331.
XX
XX 08-NOV-2001; 2001US-00010002.
XX
XX (ISIS-) ISIS PHARM INC.
PA
```

```
XX
PI Baker BF, Dobie K;
XX
DR WPI; 2003-441517/41.
XX
PT New antisense oligonucleotide compounds, useful for diagnosing,
PT preventing and/or treating conditions with aberrant activity of the
PT activating transcription factor 3, such as ischaemia and diabetes.
XX
PS Example 15; Page 77; 126pp; English.
XX
CC The invention relates to antisense compounds, compositions and methods
CC for modulating the expression for activating transcription factor 3
CC (ATF3). ATF3 is also known as liver regeneration factor-1 (LRF-1), CRG-5,
CC LRG-21, and T1-241. The invention is useful for the diagnosis, prevention
CC and/or treatment of diseases or conditions associated with aberrant
CC expression or activity of ATF3, such as ischaemia and diabetes. The
CC antisense compound is useful in antisense therapy. The present sequence
CC is an antisense oligonucleotide targeted to human ATF3 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP, 7 A, 6 C, 4 G, 3 T, 0 U, 0 Other;
XX
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 3958 ATGTGGCAGGGGCTCTGCT 3977
Db 20 ATGTGGCAGGGGCTCTGCT 1
XX
RESULT 909
ABZ59815/c
ID ABZ59815 standard; RNA; 20 BP.
XX
AC ABZ59815;
XX
DT 01-APR-2003 (first entry)
XX
DE Potato gene PCR primer drr20.
XX
KM Potato; plant; mitochondrial carrier protein; elongation factor EF-2;
KW transferrin binding protein; receptor-like protein kinase; helicase;
KW non-long terminal repeat retroelement reverse transcriptase;
XX
XX overwatering; transgenic; reverse transcriptase; PCR; primer; ss.
XX
OS Synthetic.
XX
PN DE10114063-A1.
XX
PD 10-OCT-2002.
XX
PF 22-MAR-2001; 2001DE-01014063.
XX
PR 22-MAR-2001; 2001DE-01014063.
XX
PA (MPBC-) MPB COLOGNE GMBH MOLECULAR PLANT & PROTE.
XX
PI Buelow U, Tschannke M, Hausseuhl K;
XX
XX WPI; 2003-041808/04.
XX
XX New DNA sequences from potato, useful for producing plants with altered
XX properties, e.g. tolerance of flooding, also related proteins, antibodies
XX and inhibitory sequences.
XX
PS Example 1; Page 8; 26pp; German.
XX
CC The invention relates to DNA sequences (I) that encode six specific plant
CC proteins: (i) a protein (ABP60425) with mitochondrial carrier protein
CC activity (Iia); (ii) a protein (ABP60426) with transferrin binding
CC protein activity (Iib); (iii) a protein (ABP60427) with receptor-like
```

CC protein kinase activity (IIC); (iv) a protein (ABP60428) with elongation
CC factor BF-2 activity (IId); (v) a protein (ABP60429) with non-long
CC terminal repeat retroelement reverse transcriptase activity (IIE); or
CC (vi) a protein (ABP60430) with helicase activity (IIf). (I), also related
CC sequences, derived ribozymes and antisense sequences, expression vectors,
CC encoded proteins and antibodies against the proteins, are used to produce
CC plants with altered properties, including tolerance of overwatering. The
CC antibodies are also used for isolation of the proteins and in
CC immunoassays. Also (I) or their primer or probe fragments are used to
CC screen for terminators and constitutively, aerobically or anaerobically
CC inducible plant promoters, specifically for use in potatoes and the
CC sequence that encodes (IId) is used to alter the translation profile in
CC plants. Since (I) are derived from potato, their promoters and
CC terminators provide high level transgene expression in potato, with
CC improved tissue specificity and inducibility, and can also be used to
CC control endogenous genes. The present sequence is that of a PCR primer
CC used in the first strand synthesis of cDNAs derived from potato

XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAACAAAGAAA 5412
Db 20 AAAAAAAAAAAAAAAAAAAAA 1

RESULT 910
ACA72109/C
ID ACA72109 standard; DNA; 20 BP.
XX ACA72109;
XX 11-AUG-2003 (first entry)

DE Human PRO polypeptide associated oligonucleotide SEQ ID NO 577.
XX
XX Human; de; thrombolytic agent; interferon; interleukin; cytokine;
KM erythropoietin; colony stimulating factor; cancer; colorectal carcinoma;
KM apoptosis related condition; AIDS; amyotrophic lateral sclerosis;
KM inflammatory disease; asthma; atherosclerosis; neurodegenerative disease;
KM gastrointestinal disorder; Alzheimer's disease; Parkinson's disease;
KM hypertension; myocardial ischaemia; kidney disease; carcinogenesis;
KM glomerulonephritis; lung disease; pulmonary hypertension; preeclampsia;
KM bronchial asthma; gastric ulcer; renal failure; cardiovascular disease;
KM inflammatory bowel disease; reproductive disorder; premature labour.

XX Homo sapiens.
XX
XX US2002177553-A1.
XX
XX 28-NOV-2002.
XX
XX 15-OCT-2001; 2001US-00978192.
XX
XX 17-OCT-1997; 97US-0062250P.
PR 03-NOV-1997; 97US-0064249P.
PR 13-NOV-1997; 97US-0065311P.
PR 21-NOV-1997; 97US-0066364P.
PR 10-MAR-1998; 98US-0077450P.
PR 11-MAR-1998; 98US-0077632P.
PR 11-MAR-1998; 98US-0077641P.
PR 11-MAR-1998; 98US-0077649P.
PR 12-MAR-1998; 98US-0077791P.
PR 13-MAR-1998; 98US-0078004P.
PR 17-MAR-1998; 98US-00040220.
PR 20-MAR-1998; 98US-0078866P.
PR 20-MAR-1998; 98US-0078910P.
PR 20-MAR-1998; 98US-0078936P.
PR 20-MAR-1998; 98US-0078939P.
PR 25-MAR-1998; 98US-0079294P.

PR 26-MAR-1998; 98US-0079656P.
PR 27-MAR-1998; 98US-0079663P.
PR 27-MAR-1998; 98US-0079664P.
PR 27-MAR-1998; 98US-0079689P.
PR 27-MAR-1998; 98US-0079728P.
PR 27-MAR-1998; 98US-0079786P.
PR 30-MAR-1998; 98US-0079920P.
PR 30-MAR-1998; 98US-0079923P.
PR 26-JUN-1998; 98US-0010541P.
PR 07-OCT-1998; 98US-0016897P.
PR 02-NOV-1998; 98US-0016821P.
PR 06-NOV-1998; 98US-0018736P.
PR 20-NOV-1998; 98US-0024855P.
PR 07-DEC-1998; 98US-0020505P.
PR 22-DEC-1998; 98US-0021851P.
PR 05-JAN-1999; 99US-0000010P.
PR 05-MAR-1999; 99US-0025445P.
PR 08-MAR-1999; 99US-0050502P.
PR 10-MAR-1999; 99US-0026568P.
PR 10-MAR-1999; 99US-0050519P.
PR 12-MAR-1999; 99US-0026721P.
PR 12-APR-1999; 99US-0028429P.
PR 14-MAY-1999; 99US-0031183P.
PR 14-MAY-1999; 99US-0031073P.
PR 02-JUN-1999; 99US-0031252P.
PR 25-AUG-1999; 99US-0038013P.
PR 25-AUG-1999; 99US-0038013P.
PR 25-AUG-1999; 99US-0038014P.
PR 30-NOV-1999; 99US-0028313P.
PR 02-DEC-1999; 99US-0028551P.
PR 02-DEC-1999; 99US-0028565P.
PR 16-DEC-1999; 99US-0030309P.
PR 30-DEC-1999; 99US-0031243P.
PR 05-JAN-2000; 99US-0031274P.
PR 05-JAN-2000; 2000US-0000219P.
PR 06-JAN-2000; 2000US-0000277P.
PR 06-JAN-2000; 2000US-0000376P.
PR 11-FEB-2000; 2000US-0003565P.
PR 18-FEB-2000; 2000US-0004341P.
PR 24-FEB-2000; 2000US-0005004P.
PR 02-MAR-2000; 2000US-0005841P.
PR 10-MAR-2000; 2000US-0006319P.
PR 21-MAR-2000; 2000US-0007532P.
PR 30-MAR-2000; 2000US-0008439P.
PR 17-MAY-2000; 2000US-0013705P.
PR 22-MAY-2000; 2000US-0014042P.
PR 30-MAY-2000; 2000US-0014941P.
PR 02-JUN-2000; 2000US-0015264P.
PR 28-JUL-2000; 2000US-0020710P.
PR 24-AUG-2000; 2000US-0023328P.
PR 08-NOV-2000; 2000US-0070923P.
PR 27-NOV-2000; 2000US-0072374P.
PR 01-DEC-2000; 2000US-0074259P.
PR 20-DEC-2000; 2000US-0074259P.
PR 20-DEC-2000; 2000US-0074259P.
PR 28-FEB-2001; 2001US-0081674P.
PR 22-MAR-2001; 2001US-0081692P.
PR 22-MAR-2001; 2001US-0081692P.
PR 10-MAY-2001; 2001US-0085420P.
PR 10-MAY-2001; 2001US-0085428P.
PR 25-MAY-2001; 2001US-0085428P.
PR 01-JUN-2001; 2001US-0087203P.
PR 01-JUN-2001; 2001US-0087203P.
PR 05-JUN-2001; 2001US-0087450P.
PR 14-JUN-2001; 2001US-0088263P.
PR 19-JUN-2001; 2001US-0088634P.
PR 20-JUN-2001; 2001US-0091969P.
PR 29-JUL-2001; 2001US-0092106P.
PR 09-JUL-2001; 2001US-0092173P.
PR 30-JUL-2001; 2001US-0091858P.
XX

PA (GETH) GENENTECH INC.
 XX
 PI Abkhenaazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
 PI Ferreira N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
 PI Goddard A, Godowski PJ, Grimaldi JC, Gunney AJ, Hillan KJ;
 PI Kijavira J, Kuo SS, Napier MA, Pan J, Paoli NF, Roy MA, Shelton DL;
 PI Stewart TA, Tumas D, Williams PM, Wood WI;
 XX WPI; 2003-328499/31.
 DR
 PT New isolated PRO polypeptides e.g. PRO213, PRO274 and PRO300, for use as
 PT pharmaceuticals, diagnostics, biosensors and bioreactors, for identifying
 PT modulators of receptor-ligand interactions.
 XX
 PS Disclosure, SEQ ID NO 577; 55pp; English.
 XX
 CC The invention relates to an isolated secreted and transmembrane
 CC polypeptide, designated as PRO polypeptide. The PRO polypeptide is useful
 CC in PRO polypeptide detection methods. The PRO polypeptide is useful for
 CC linking a bioactive molecule to a cell. The PRO polypeptide or an
 CC antibody against it is useful for modulating a biological activity of a
 CC cell. The PRO polypeptide is useful in industrial applications including
 CC pharmaceuticals, diagnostics, biosensors and bioreactors. The PRO
 CC polypeptide is also useful as a thrombolytic agent, interferon,
 CC interleukin, erythropoietin, colony stimulating factor and other
 CC cytokines. The PRO polypeptide is useful for treating diseases such as
 CC cancer e.g. colorectal carcinoma, apoptosis related conditions e.g. AIDS,
 CC amyotrophic lateral sclerosis, inflammatory disease e.g. asthma,
 CC atherosclerosis, neurodegenerative disease e.g. Alzheimer's disease,
 CC Parkinson's disease, cardiovascular disease e.g. hypertension and
 CC myocardial ischemia; kidney disease e.g. renal failure and
 CC glomerulonephritis; lung disease e.g. pulmonary hypertension, bronchial
 CC asthma; gastrointestinal disorders e.g. gastric ulcer and inflammatory
 CC bowel disease; reproductive disorders e.g. premature labour and
 CC pre-eclampsia; carcinogenesis. The present sequence represents a PRO
 CC polypeptide associated oligonucleotide of the invention. Note: The
 CC sequence data for this patent did not form part of the printed
 CC specification but was obtained in electronic format directly from USPRO
 CC at seqdata.uspto.gov/sequence.html?docID=20020177553
 XX
 SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 5196 TCAGCGTGGAGGCCACGTG 5215
 Db 20 TCAGTGTGAAGGCCACGTG 1
 RESULT 911
 AB259177/c
 ID AB259177 standard; DNA; 20 BP.
 XX
 XX AB259177;
 AC
 DT 28-APR-2003 (first entry)
 XX
 XX Human TGR18 DNA expression analysing RT-PCR forward primer.
 DE
 XX
 KW G-protein coupled receptor; GPCR; TGR2; TGR38; TGR118; TGR164; TGR343;
 KW TGR336; antiasthmatic; neuroprotective; cerebroprotective; nephroprotective;
 KW anticonvulsant; hypotensive; hepatotropic; dermatological; human;
 KW immunosuppressive; antiinflammatory; RT-PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX W02003004678-A2.
 XX
 XX 16-JAN-2003.
 XX
 XX 01-JUL-2002; 2002WO-US020860.

XX
 PR 03-JUL-2001; 2001US-0302800P.
 XX
 PA (TULAR) TULARIK INC.
 XX
 XX Tian H, Dai K, Chen J, Zhao J, Cutler G;
 PI
 XX WPI; 2003-210368/20.
 DR
 XX
 PT New G-protein coupled receptor polypeptides designated TGR2, TGR38,
 PT TGR118, TGR164 and TGR358, useful as targets for screening drugs
 PT for treating or preventing e.g. asthma, multiple sclerosis, stroke or
 PT nephrolithiasis.
 XX
 PS Example; Page 56; 74pp; English.
 XX
 CC The invention provides new G-protein coupled receptor (GPCR) polypeptides
 CC designated TGR2, TGR38, TGR118, TGR164, TGR343 and TGR358 and encoding
 CC polynucleotides. The polypeptides can be expressed by standard DNA
 CC recombinant methodology. The polypeptides are useful for screening or
 CC identifying modulators of GPCR or signal transduction. The modulators of
 CC signal transduction are useful for treating or preventing TGR-associated
 CC disorders, e.g. asthma, multiple sclerosis or kidney disease. The
 CC polypeptides are useful as targets for diagnosing or treating e.g.
 CC epilepsy, stroke, neurodegeneration, hypogonadism, hyperprolactinemia,
 CC asymptomatic urinary abnormalities, hypertension, nephrolithiasis,
 CC cirrhosis, lesions, jaundice, psoriasis, lupus erythematosus, or acute
 CC inflammatory dermatoses. Sequences AB259173-184 represent RT-PCR primers
 CC used for analysing the expression of the various TGR polypeptides in
 CC human tissues
 XX
 SQ Sequence 20 BP; 4 A; 9 C; 2 G; 5 T; 0 U; 0 Other;
 Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1431 TGTGAGGAGAAATCGAGGAC 1450
 Db 20 TGTGAGGAGAAATGTAGGCC 1
 RESULT 912
 ABX92749/c
 ID ABX92749 standard; DNA; 20 BP.
 XX
 XX ABX92749;
 AC
 DT 20-MAY-2003 (first entry)
 XX
 XX Human PRO DNA PCR primer SEQ ID NO 577.
 DE
 XX
 KW Human, PRO polypeptide; secreted and transmembrane protein;
 KW immune disorder; diabetes; hyper-insulinaemia; hypo-insulinaemia;
 KW cardiac insufficiency; nervous system disorder; kidney disorder;
 KW bone disorder; cartilage disorder; arthritis; tumour; wound healing;
 KW genetic disorder; cystostatic; antidiabetic; antiinflammatory;
 KW antidiabetic; anti-tumour; vulnerrary; antianaemic; dermatological;
 KW cardiant; PCR; primer; ss.
 XX
 XX
 OS Homo sapiens.
 XX
 XX US2002169284-A1.
 XX
 PD 14-NOV-2002.
 XX
 XX 16-OCT-2001; 2001US-00978697.
 XX
 XX 26-MAY-1981; 81US-00267213.
 XX 17-OCT-1997; 97US-0062250P.
 XX 03-NOV-1997; 97US-0064249P.
 XX 13-NOV-1997; 97US-0065311P.
 XX 21-NOV-1997; 97US-0066364P.

PR 10-MAR-1998; 98US-0077450P.
PR 11-MAR-1998; 98US-0077632P.
PR 11-MAR-1998; 98US-0077641P.
PR 11-MAR-1998; 98US-0077649P.
PR 12-MAR-1998; 98US-0077791P.
PR 13-MAR-1998; 98US-0078004P.
PR 17-MAR-1998; 98US-00040220.
PR 20-MAR-1998; 98US-0078886P.
PR 20-MAR-1998; 98US-0078910P.
PR 20-MAR-1998; 98US-0078936P.
PR 20-MAR-1998; 98US-0078939P.
PR 25-MAR-1998; 98US-0079284P.
PR 26-MAR-1998; 98US-0079656P.
PR 27-MAR-1998; 98US-0079663P.
PR 27-MAR-1998; 98US-0079664P.
PR 27-MAR-1998; 98US-0079689P.
PR 27-MAR-1998; 98US-0079728P.
PR 27-MAR-1998; 98US-0079786P.
PR 30-MAR-1998; 98US-0079920P.
PR 30-MAR-1998; 98US-0079923P.
PR 26-JUN-1998; 98US-00105413.
PR 07-OCT-1998; 98US-00168978.
PR 07-OCT-1998; 98WO-US021141.
PR 02-NOV-1998; 98US-00184216.
PR 06-NOV-1998; 98US-00187368.
PR 20-NOV-1998; 98WO-US024855.
PR 22-DEC-1998; 98US-00202054.
PR 05-JAN-1999; 99WO-US0010106.
PR 05-MAR-1999; 99WO-US0050285.
PR 08-MAR-1999; 99WO-US0050285.
PR 10-MAR-1999; 99US-00265686.
PR 12-APR-1999; 99WO-US005190.
PR 14-MAY-1999; 99US-00311832.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 25-AUG-1999; 99US-00380138.
PR 25-AUG-1999; 99US-00380142.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 30-DEC-1999; 99WO-US031243.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015664.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000US-00709238.
PR 27-NOV-2000; 2000US-00723749.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001US-00816744.
PR 22-MAR-2001; 2001US-00816920.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.

PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 30-JUL-2001; 2001WO-US021735.
XX
XX (GETH) GENENTECH INC.
XX
XX Ashkenazi A, Baker KP, Borstein D, Desnoyers L, Eaton D;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Garber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kijavini IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
XX WPI; 2003-288163/28.
DR
XX
XX Novel secreted and transmembrane polypeptides and polynucleotides
PT encoding them useful for treating cancer, kidney diseases, bone,
PT cartilage disorders and immune deficiencies.
XX
XX
XX Example 114; Page 192; 459pp; English.
XX
XX The present invention relates to the isolation of novel human PRO
CC polypeptides, and the polynucleotide sequences encoding them. The PRO
CC polypeptides are secreted and transmembrane proteins. The PRO
CC polypeptides are useful for detecting other PRO polypeptides, for linking
CC bioactive molecules to cells expressing PRO polypeptides, for modulating
CC biological activities of cells expressing PRO polypeptides, and for
CC identifying agonists or antagonists. The bioactive molecule maybe a
CC toxin, radiolabel or antibody, and causes apoptosis or death of the cell.
CC The PRO polypeptides are useful for treating immune disorders, diabetes
CC or hyper- or hypo-insulinaemia, cardiac insufficiency, nervous system
CC disorders, kidney disorders, bone and cartilage disorders or arthritis,
CC tumours, and wound healing. The polynucleotide sequences encoding PRO
CC polypeptides are useful as hybridisation probes, in chromosome and gene
CC mapping, in the generation of antisense RNA and DNA, in the preparation
CC of PRO polypeptides, for generating transgenic animals or knockout
CC animals, for the genetic analysis of individuals with genetic disorders,
CC and in gene therapy. The present sequence represents a PCR primer used in
CC the examples of the present invention. Note: The sequence data for this
CC patent was obtained in electronic format directly from the USPTO web site
CC at seqdata.uspto.gov/pspsdIDENTry.html
XX
XX
SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5196 TCAGCGTGGAGGCCACGCG 5215
Db 20 TCAGTGTGAAGGCCACGCG 1
RESULT 913
ABX79181
ID ABX79181 standard; DNA; 20 BP.
XX
AC ABX79181;
XX
DT 15-APR-2003 (first entry)
XX
XX Thio-modified 20da oligonucleotide.
DE
XX
XX Nanoparticle; ss; nucleic acid detection; viral disease; probe;
KM human immunodeficiency virus infection; hepatitis virus infection;
KM herpes virus infection; cytomegalovirus infection; forensic science;
KM Epstein-Barr virus infection; bacterial disease; gene therapy;

KW sexually transmitted disease; inherited disorder; DNA sequencing;
KM paternity testing; cell line authentication.
XX Synthetic.
XX US2002155462-A1.
XX
XX 24-OCT-2002.
XX
XX 12-OCT-2001; 2001US-00976577.
XX
XX 29-JUL-1996; 96US-0031809P.
XX 21-JUL-1997; 97MO-US012783.
XX 29-JAN-1999; 99US-00240755.
XX 25-JUN-1999; 98US-00344667.
XX 26-APR-2000; 2000US-0200161P.
XX 26-JUN-2000; 2000US-00603830.
XX
XX (NANO-) NANOSPHERE INC.
XX
XX Mirkin CA, Letsinger RL, Nucic RC, Storchoff JT, Elghanian R;
XX Taton TA;
XX WPI; 2003-138491/19.
XX
XX Detecting nucleic acids having at least 2 portions comprises use of
XX nanoparticles which have oligonucleotides attached to them that are
XX complementary to portions of the nucleic acid sequence.
XX
XX Example 18; Page 44; 130pp; English.
XX
XX The invention relates to detecting a nucleic acid (NA) having at least 2
XX portions, comprising providing a type of nanoparticles (NP) having
XX attached to oligonucleotides (O) ((O) on each NP has a sequence
XX complementary to sequence of at least 2 portions of NA), contacting NA
XX and NP to allow hybridisation of (O) on NP with 2 or more portions of NA,
XX and observing a detectable change brought about by hybridisation of (O)
XX on NP with NA. The nanoparticle is useful for separating a selected
XX nucleic acid having at least 2 portions, from other nucleic acids, and
XX for detecting nucleic acids having at least 2 portions. The method of
XX using NP is useful for detecting any type of nucleic acids which may be
XX used for diagnosis of disease and in sequencing of nucleic acids.
XX Preferably, the method is useful for detecting nucleic acids for
XX diagnosis and/or monitoring of viral diseases (human immunodeficiency
XX virus, hepatitis virus, herpes virus, cytomegalovirus and Epstein-Barr
XX virus), bacterial diseases, sexually transmitted diseases, inherited
XX disorders, in forensic, in DNA sequencing, for paternity testing, for
XX cell line authentication and for monitoring gene therapy. The method is
XX useful in research and analytical laboratories in DNA sequencing and in
XX the field to detect the presence of specific pathogens. Detecting nucleic
XX acids based on observing a colour change with the naked eye is cheap,
XX fast, simple and robust, and do not require specialised expensive
XX equipment. The present sequence is a nanoparticle (e.g. gold particles)
XX labelled probe used to demonstrate the method of the invention
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAAAAAAATCAAAAAAAAAAGAA 5412
DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
RESULT 914
ACCA7072/c
ID ACC47072 standard; DNA; 20 BP.
XX
XX ACC47072;
XX
DT 05-JUN-2003 (first entry)

XX
XX Mouse phospholipase A2 antisense oligonucleotide SEQ ID NO:169.
XX
XX Phospholipase A2 group IIA; synovial; antisense modulation; inflammation;
XX phospholipase A2 group IIA inhibitor; phosphorothioate; antiinflammatory;
XX antidiabetic; cytostatic; antipsoriatic; vaccine; gene therapy; cancer;
XX psoriasis; diabetes; ss.
XX
XX Mus musculus.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "phosphorothioate backbone"
XX modified_base 1..5
XX /tag= b
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
XX modified_base 16..20
XX /tag= c
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyl (2'-MOE) gapmer"
XX
XX WO200297133-A1.
XX
XX 05-DEC-2002.
XX
XX 21-MAY-2002; 2002WO-US016135.
XX
XX 25-MAY-2001; 2001US-00865866.
XX
XX (ISIS-) ISIS PHARM INC.
XX Bennett CF, Wyatt JR;
XX WPI; 2003-140495/13.
XX
XX New compound that hybridizes with and inhibits the expression of
XX Phospholipase A2, group IIA, useful for preparing a composition for
XX treating or preventing inflammation, cancer, psoriasis or diabetes.
XX
XX Example 15; Page 91; 135pp; English.
XX
XX The present invention describes a compound (1) comprising 8-50
XX nucleobases which is targeted to a 5' untranslated region (UTR), coding,
XX 3' UTR or intron region of a nucleic acid molecule encoding phospholipase
XX A2, group IIA (synovial), where the compound specifically hybridises with
XX and inhibits the expression of phospholipase A2, group IIA (synovial).
XX Also described: (1) a composition comprising the expression of phospholipase
XX or diluent; (2) a method of inhibiting the expression of phospholipase
XX A2, group IIA in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with phospholipase A2, group IIA
XX (synovial). (1) has antiinflammatory, antidiabetic, cytostatic and
XX antipsoriatic activities, and can be used in vaccines and in gene
XX therapy. The compound (1) can be used for preparing a composition for
XX treating or preventing inflammation, cancer, psoriasis or diabetes. The
XX present sequence represents a mouse phospholipase A2 group IIA (synovial)
XX chimeric phosphorothioate antisense oligonucleotide, which is used in an
XX example from the present invention
XX
SQ Sequence 20 BP; 7 A; 3 C; 9 G; 1 T; 0 U; 0 Other;
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 458 TGCCTGCTGATACCTTCAC 477
DB 20 TGCCTGCTGCTTCCTTCAC 1

CC acid molecule, a host cell comprising the vector (and producing a PRO
 CC polypeptide), a chimaeric molecule comprising the PRO polypeptide fused
 CC to a heterologous amino acid sequence and an anti-PRO antibody. The PRO
 CC polypeptides or polynucleotides are useful as pharmaceuticals,
 CC diagnostics, biosensors or bioreactors. These are particularly useful for
 CC detecting or treating e.g. malignancies or cancers (e.g. ovarian cancer,
 CC colorectal cancer, sarcoma, leukaemia or lymphoma), inflammatory disease,
 CC necrosis, atherosclerosis, infertility, premature aging, psoriasis,
 CC inflammatory disease, renal disease, arthritis, immune-mediated alopecia,
 CC stroke, encephalitis, hepatitis, or multiple sclerosis in mammals. The
 CC PRO polypeptides are useful in drug screening, particularly as targets
 CC for therapeutic intervention in these diseases, and in the diagnostic
 CC determination of the presence of these diseases. The PRO polypeptides are
 CC also useful as molecular weight markers, or for chromosome
 CC identification. The PRO genes are useful as hybridisation probes, or for
 CC screening libraries of human cDNA, genomic DNA or mRNA. The PRO genes may
 CC also be used in gene therapy, particularly for replacing a defective
 CC gene. The present sequence is a TaqMan PCR primer used in a Northern blot
 CC experiment to detect PRO sequences in certain cancer cell lines
 CC
 SO Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Db Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

5196 TCAGCGTGGAGGCGACGCTG 5215
 20 TCAGTGTGAAGGCGACGCTG 1

RESULT 916
 ABX92177
 ID ABX92177 standard; DNA; 20 BP.

XX ABX92177;
 XX
 DT 12-MAY-2003 (first entry)

DE Nanoparticle-associated oligonucleotide SEQ ID 55.

XX Nonoparticle; nucleic acid detection; hybridisation; diagnosis;
 KM sequencing; viral infection; human immunodeficiency virus; HIV;
 KM hepatitis virus; herpes virus; cytomegalovirus; Epstein-Barr virus;
 KM bacterial infection; sexually transmitted diseases; inherited disorder;
 KM forensic; paternity testing; cell line authentication; gene therapy; ss.

XX Synthetic.

PN US2002155458-A1.

XX 24-OCT-2002.

PF 28-SEP-2001; 2001US-00967409.

XX 29-JUL-1996; 96US-0031809P.

PR 21-JUL-1997; 97MO-US012783.

PR 29-JAN-1999; 99US-00240755.

PR 25-JUN-1999; 99US-00344667.

PR 26-APR-2000; 2000US-0200161P.

PR 26-JUN-2000; 2000US-00603830.

XX (NANO-) NANOSPHERE INC.

PI Mirkin CA, Letsinger RL, Mucic RC, Storchhoff JU, Elghanian R;
 PI Taton TA;

XX WPI, 2003-182627/18.
 DR
 XX
 XX
 PT
 PT
 XX

Detecting nucleic acids having at least two portions involves use of
 PT nanoparticles which have oligonucleotides attached to them that are
 PT complementary to portions of the nucleic acid sequence.

PS Disclosure; Page 59; 130pp; English.

XX This invention describes a novel method of detecting nucleic acid having
 CC at least two portions. The method involves providing nanoparticles
 CC attached to oligonucleotides, where the oligonucleotide on each
 CC nanoparticle have a sequence complementary to a sequence of at least two
 CC portions of nucleic acid, contacting nucleic acid and nanoparticle to
 CC allow hybridisation of the oligonucleotide on the nanoparticle with two
 CC or more portions of nucleic acid and observing a detectable change
 CC brought about by hybridisation of the oligonucleotide nanoparticle with
 CC nucleic acid. The method is useful for separating a selected nucleic acid
 CC having at least two portions, from other nucleic acids and for detecting
 CC nucleic acids having at least two portions. The method is useful for
 CC detecting any type of nucleic acids which may be used for diagnosis of
 CC disease and in sequencing of nucleic acids. Preferably, the method is
 CC useful for detecting nucleic acids for diagnosis and/or monitoring of
 CC viral infections (human immunodeficiency virus (HIV), hepatitis virus,
 CC herpes virus, cytomegalovirus and Epstein-Barr virus), bacterial
 CC diseases, sexually transmitted diseases, inherited disorders, in
 CC forensics, in DNA sequencing, for paternity testing, for cell line
 CC authentication, and for monitoring gene therapy. The method is useful in
 CC research and analytical laboratories in DNA sequencing, in the field to
 CC detect the presence of specific pathogens. Detecting nucleic acids based
 CC on observing a colour change with the naked eye is cheap, fast, simple
 CC -ABX92186 and ABQ77356 represent oligonucleotides used to illustrate the
 CC method of the invention
 CC
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

QY Query Match 0.3%; Score 15.2; DB 1; Length 20;
 Db Best Local Similarity 85.0%; Pred. No. 9.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

5393 AAAAAAAAAATCAAAAAGAAA 5412
 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 917
 AAD52927/c
 ID AAD52927 standard; DNA; 20 BP.

XX AAD52927;

DT 14-MAY-2003 (first entry)

DE Human TTYH2 gene Intron 9 junction sequence.

KM Human; tweety homologue 2; TTYH2; therapy; cancer; tumour; cytostatic;
 KM diagnostic marker; ds.

XX Homo sapiens.

FN Key Location/Qualifiers

FT Intron 1..10

FT exon /*tag= a

FT /*tag= b

FT /number= 9

PN WO200292629-A1.

XX 21-NOV-2002.

PF 14-MAY-2002; 2002WO-AU000591.

PR 14-MAY-2001; 2001AU-00004971.

XX (UYOU-) UNIV QUEENSLAND TECHNOLOGY.
 XX Clements JA;
 XX

DR WPI; 2003-129264/12.
XX
XX New human tweety homolog 2 polypeptides and polynucleotides, useful for
PT producing an antigen-binding molecule that is immuno-interactive with the
PT polypeptide or as diagnostic markers for cancers.
XX
XX Example 3; Fig 4B; 176pp; English.
PS
CC The invention relates to human tweety homologue 2 (TYH2) polypeptide and
CC polynucleotide sequence. TYH2 is useful for producing an antigen-binding
CC molecule that is immuno-interactive with the polypeptide. The agent is
CC useful for manufacturing a medicament for restoring a normal level and/or
CC functional activity of TYH2 expression in a patient, and for treating or
CC preventing cancer or tumour. TYH2 sequences may also be used to provide
CC both drug targets and regulators to promote or inhibit one or more
CC activities, and to provide diagnostic markers for cancers. The present
CC sequence is human TYH2 gene intron/exon junction sequence
XX
SQ Sequence 20 BP; 4 A; 9 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4602 TGGACAGGCTGTGAGCCAGG 4621
DB 20 TGGTCAGGCTGTGAGCCAGG 1

RESULT 918
AAL53968
ID AAL53968 standard; DNA; 20 BP.
XX
AC AAL53968;
XX
DT 18-FEB-2003 (first entry)
XX
XX DNA mutation detection related ribonucleotide, SEQ ID No 18.
DE
XX Detecting; point mutation; hybridising; target DNA; duplex; RNase H;
KM single nucleotide polymorphism; ss.
XX
OS Unidentified.
XX
PN US2002142308-A1.
XX
PD 03-OCT-2002.
XX
PF 30-MAR-2001; 2001US-00823634.
XX
PR 30-MAR-2001; 2001US-00823634.
XX
PA (DAT/) DATAGUPTA N.
PA (TSEN/) TSENG T.
XX
PI Datagupta N, Tseng T;
XX
DR WPI; 2003-102506/09.
XX
XX Detecting point mutation in DNA strand, by hybridizing target DNA strand
PT having mutation with test DNA strand to form duplex, contacting the
PT duplex with RNase H and determining the cleavage of test strand by RNase
PT H.
XX
PS Example 5; Fig 4; 26pp; English.
XX
CC The invention relates to a novel method for detecting a point mutation in
CC a DNA strand. The novel method comprises hybridising a target DNA strand
CC containing or suspected of containing a point mutation with a test
CC nucleic acid strand complementary to the DNA strand to form a target DNA
CC strand/test nucleic acid strand duplex, contacting the duplex with an
CC RNase H, and determining whether the ribonucleotide residues within the
CC nucleotide sequence are cleaved by RNase H. The method is useful for

CC detecting a point mutation in a DNA strand, where the point mutation to
CC be detected is a single nucleotide polymorphism, preferably a
CC polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian
CC or human genome. The method is useful to detect any nucleic acids from
CC any species of organisms such as Acinobacter, Bacillus, Candida,
CC Enterococcus, Haemophilus, Mycobacterium and Streptococcus, and viruses.
CC This polynucleotide sequence represents a ribonucleotide relating to the
CC mutation detecting method of the invention
XX
SQ Sequence 20 BP; 17 A; 0 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAATACAAAAGANA 5412
DB 1 AAAAAATATTTAAAAAAA 20

RESULT 919
ACD27255
ID ACD27255 standard; DNA; 20 BP.
XX
AC ACD27255;
XX
DT 15-OCT-2003 (first entry)
XX
XX Nanotechnology nucleic acid detection method associated #54.
DE
XX Nanotechnology; ss; nucleic acid detection; nanoparticle;
KM virus detection; human immunodeficiency virus; HIV; hepatitis; herpes;
KM cytomegalovirus; Epstein-Barr virus; bacterial disease; DNA sequencing;
KM sexually transmitted disease; inherited disorder; forensic;
KM paternity testing; cell line authentication.
XX
OS Synthetic.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1
FT /*tag= a
FT /mod_base= OTHER
FT /note="OTHER= Thiol modified" "
XX
PN US200215459-A1.
XX
PD 24-OCT-2002.
XX
PF 11-OCT-2001; 2001US-00975062.
XX
PR 29-JUL-1996; 96US-0031809P.
PR 21-JUL-1997; 97MO-US012783.
PR 29-JAN-1999; 99US-00240755.
PR 25-JUN-1999; 99US-00344667.
PR 26-APR-2000; 2000US-0200161P.
PR 26-JUN-2000; 2000US-00603830.
XX
XX (NANO-) NANOSPHERE INC.
XX
XX Mirkin CA, Letsinger RL, Mucic RC, Storchoff JU, Elghanian R;
PI Taton TA;
XX
DR WPI; 2003-228114/22.
XX
XX Detecting nucleic acids having 2 portions e.g. for detecting disease.
PT comprises use of nanoparticles which have oligonucleotides attached to
PT them that are complementary to portions of the nucleic acid sequence.
XX
PS Example 18; Page 43; 129pp; English.
XX
CC This invention relates to a novel method for detecting a nucleic acid
CC having 2 portions. The method comprises providing nanoparticles having
CC oligonucleotides attached, where the oligonucleotide on each nanoparticle

CC has a sequence complementary to a sequence of 2 portions of nucleic acid.
CC The nucleic acid and nanoparticle are contacted to allow hybridisation of
CC the oligonucleotide on the nanoparticle with two or more portions of
CC nucleic acid and observing a detectable change brought about by the
CC hybridisation. The method of the invention is useful for separating a
CC selected nucleic acid having 2 portions, from other nucleic acids, and
CC for detecting nucleic acids having 2 portions. The method of the
CC invention is useful for detecting any type of nucleic acids which may be
CC used for diagnosis of disease and in sequencing of nucleic acids.
CC Preferably, the method is useful for detecting nucleic acids for
CC diagnosis and/or monitoring of viral diseases (human immunodeficiency
CC virus, hepatitis virus, herpes virus, cytomegalovirus and Epstein-Barr
CC virus), bacterial diseases, sexually transmitted diseases, inherited
CC disorders, in forensics, in DNA sequencing, for paternity testing, for
CC cell line authentication, for monitoring gene therapy, etc. This method
CC involves detecting nucleic acids based on observing a colour change with
CC the naked eye so is cheap, fast, simple and robust, and does not require
CC specialised expensive equipment. The present sequence represents a thiol
CC modified oligonucleotide sequence used to demonstrate the method of the
CC invention

XX Sequence 20 BP, 20 A, 0 C, 0 G, 0 T, 0 U, 0 Other;
SQ

Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAATCAAAAAAAAAAGAAA 5412
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAA 20

RESULT 920
ACD27125
XX ACD27125 standard; DNA; 20 BP.
XX
XX ACD27125;
XX
DT 15-OCT-2003 (first entry)
XX
XX Nanotechnology nucleic acid detection method oligonucleotide #54.
DE
XX Nanotechnology; nucleic acid detection; nanoparticle; ss; forensic;
KM DNA sequencing; paternity testing; cell line authentication.
XX
XX Synthetic.
OS
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= Thiol modified" "

PN US2002164605-A1.
XX
XX
PD 07-NOV-2002.
XX
XX
PF 28-SEP-2001; 2001US-00966312.
XX
XX
PR 29-JUL-1996; 96US-0031809P.
PR 21-JUL-1997; 97WO-US012783.
PR 29-JAN-1999; 99US-00240755.
PR 23-JUN-1999; 99US-00344667.
PR 26-APR-2000; 2000US-0200161P.
PR 26-JUN-2000; 2000US-00603830.
XX
XX
PA (NANO-) NANOSPHERE INC.
XX
XX Mirkin CA, Letsinger RL, Nucleic RC, Storchhoff JJ, Elghanian R;
PI Taton TA;
XX
XX WPI, 2003-247253/24.
XX

PT Detecting nucleic acid having two portions, by providing nanoparticles
PT having oligonucleotides attached to it, contacting nucleic acid and
PT nanoparticles to allow hybridization, and observing detectable change,
PT useful in forensics.

XX
XX Example 18; Page 44; 130pp; English.
XX
XX This invention relates to a novel method for detecting nucleic acid
CC sequences having two portions. The method involves providing
CC nanoparticles having oligonucleotides attached to them, which has a
CC sequence complementary to sequence of two portions of nucleic acid,
CC contacting nucleic acid and nanoparticles, to allow hybridisation of
CC oligonucleotides with two or more portions of nucleic acid, and observing
CC a detectable change brought about by hybridisation. The method of the
CC invention and the aggregate probes are useful for detecting two or more
CC nucleic acids (from a biological source) having at least two portions,
CC such as viral RNA or DNA, bacterial or fungal DNA, a gene associated with
CC a disease, synthetic, or structurally- modified natural or synthetic RNA
CC or DNA, or a product of a polymerase chain reaction amplification.
CC Nanoparticles and nanoparticle- oligonucleotide conjugates of the
CC invention are useful for nanofabrication, and for separating a selected
CC nucleic acid having two portions from other nucleic acids. The method of
CC the invention is useful in forensics, DNA sequencing, for paternity
CC testing, cell line authentication, and monitoring gene therapy.
CC Diagnostic assays employing the nanoparticle-oligonucleotide conjugates
CC of the invention improve the sensitivity of the nucleic acid detection
CC assay. The present sequence represents a thiol modified oligonucleotide
CC sequence used to demonstrate the method of the invention

XX
SQ Sequence 20 BP, 20 A, 0 C, 0 G, 0 T, 0 U, 0 Other;
XX

Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAAAAAATCAAAAAAAAAAGAAA 5412
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAA 20

RESULT 921
ACD27385
XX ACD27385 standard; DNA; 20 BP.
XX
XX ACD27385;
XX
DT 15-OCT-2003 (first entry)
XX
XX Nanotechnology nucleic acid detection method associated #54.
DE
XX Nanotechnology; ss; nucleic acid detection; DNA sequencing;
KM pathogen detection.
XX
XX Synthetic.
OS
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= Thiol modified" "

PN US2002182611-A1.
XX
XX
PD 05-DEC-2002.
XX
XX
PF 28-SEP-2001; 2001US-00966491.
XX
XX
PR 29-JUL-1996; 96US-0031809P.
PR 21-JUL-1997; 97WO-US012783.
PR 29-JAN-1999; 99US-00240755.
PR 23-JUN-1999; 99US-00344667.
PR 26-APR-2000; 2000US-0200161P.
PR 26-JUN-2000; 2000US-00603830.
XX

```
XX (NANO-) NANOSPHERE INC.
XX
XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghamian R;
XX Taton TA;
XX
XX WPI; 2003-596264/56.
XX
XX
XX Detection of nucleic acid for, e.g. research and analytical laboratories
XX in deoxyribonucleic acid sequencing, involves contacting nucleic acid
XX with nanoparticles having oligonucleotides.
XX
XX Example 18; Page 43; 109pp; English.
XX
XX This invention relates to a novel method for detecting a nucleic acid by
XX contacting a nucleic acid with at least two types of nanoparticles having
XX oligonucleotides attached, allowing hybridisation of the oligonucleotides
XX on the nanoparticles, and observing a detectable change. The
XX oligonucleotides on each nanoparticle have a sequence complementary to
XX its respective portion of the sequence of the nucleic acid to be
XX detected. The method of the invention may be used for the detection of a
XX nucleic acid used in, e.g. research and analytical laboratories in DNA
XX sequencing, in the field to detect the presence of specific pathogens, in
XX the doctor's office for quick identification of an infection to assist in
XX prescribing a drug for treatment, and in homes and health centres for
XX inexpensive first-line screening. The method of the invention detects
XX nucleic acids based on observing a colour change with the naked eye. This
XX method is cheap, fast, simple, robust and does not require specialised or
XX expensive equipment. The present sequence represents a thiol modified
XX oligonucleotide sequence used to demonstrate the method of the invention
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.3%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 9.3e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 5393 AAAAAAAAAACAAAAAGAAA 5412
XX 1 AAAAAAAAAAAAAAAAAAAAAA 20
XX
XX RESULT 922
XX ACD27190
XX ID ACD27190 standard; DNA; 20 BP.
XX
XX AC ACD27190;
XX
XX DT 15-OCT-2003 (first entry)
XX
XX DE Nanotechnology nucleic acid detection method associated #54.
XX
XX KM Nanoparticle; ss; nucleic acid detection; DNA sequencing.
XX
XX OS Synthetic.
XX
XX OS Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= Thiol modified"
XX
XX PN US2002182613-A1.
XX
XX PD 05-DEC-2002.
XX
XX PF 12-OCT-2001; 2001US-00976971.
XX
XX PR 29-JUL-1996; 96US-0031809P.
XX PR 21-JUL-1997; 97MO-US012783.
XX PR 29-JAN-1999; 99US-00240755.
XX PR 25-JUN-1999; 99US-00344667.
XX PR 26-APR-2000; 2000US-0200161P.
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PR 26-JUN-2000; 2000US-00603830.
XX
XX (NANO-) NANOSPHERE INC.
XX
XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghamian R;
XX Taton TA;
XX
XX WPI; 2003-596265/56.
XX
XX
XX Detection of nucleic acid for, e.g. research and analytical laboratories
XX in deoxyribonucleic acid sequencing, involves contacting nucleic acid
XX with nanoparticles having oligonucleotides.
XX
XX Example 18; Page 43; 107pp; English.
XX
XX This invention relates to a novel method for detecting a nucleic acid by
XX contacting nucleic acid with at least two types of nanoparticles having
XX oligonucleotides, allowing hybridisation of the oligonucleotides on the
XX nanoparticles, and observing a detectable change. The oligonucleotides on
XX each nanoparticle have a sequence complementary to its respective portion
XX of the sequence of the nucleic acid. The method of the invention may be
XX used for the detection of a nucleic acid used in, e.g. research and
XX analytical laboratories in DNA sequencing, in the field to detect the
XX presence of specific pathogens, in the doctor's office for quick the
XX identification of an infection to assist in prescribing a drug for
XX treatment, and in homes and health centres for inexpensive first-line
XX screening. The inventive method of detecting nucleic acids based on
XX observing a colour change with the naked eye are cheap, fast, simple,
XX robust (the reagents are stable), do not require specialised or expensive
XX equipment, and little or no instrumentation is required. The present
XX sequence represents a thiol modified oligonucleotide sequence used to
XX demonstrate the method of the invention
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX
XX Query Match 0.3%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 9.3e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 5393 AAAAAAAAAACAAAAAGAAA 5412
XX 1 AAAAAAAAAAAAAAAAAAAAAA 20
XX
XX RESULT 923
XX ACD27060
XX ID ACD27060 standard; DNA; 20 BP.
XX
XX AC ACD27060;
XX
XX DT 15-OCT-2003 (first entry)
XX
XX DE Nanotechnology nucleic acid detection method oligonucleotide #54.
XX
XX KM Nanotechnology; nucleic acid detection; nanofabrication; nanoprobe; ss.
XX
XX OS Synthetic.
XX
XX OS Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= Thiol modified"
XX
XX PN US2003044805-A1.
XX
XX PD 06-MAR-2003.
XX
XX PF 15-OCT-2001; 2001US-00981344.
XX
XX PR 29-JUL-1996; 96US-0031809P.
XX PR 21-JUL-1997; 97MO-US012783.
XX PR 29-JAN-1999; 99US-00240755.
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PR 25-JUN-1999; 99US-00344667.
PR 26-APR-2000; 2000US-0200161P.
PR 26-JUN-2000; 2000US-00603830.
XX
XX (NANO-) NANOSPHERE INC.
XX
XX Mirkin CA, Letsinger RL, Mucic RC, Storchhoff JU, Elghanian R;
XX Taton TA;
XX WPI, 2003-521746/49.
XX
XX Detection of nucleic acid having -2 portions used to prepare biomaterials
XX and in nanofabrication methods, comprises providing nanoparticles,
XX contacting nucleic acid and nanoparticles, and observing change.
XX
XX Example 18; Page 44; 130pp; English.
XX
XX This invention relates to a novel method for detecting nucleic acids. The
XX method comprises providing nanoparticles with oligonucleotides attached
XX to them, which have a sequence complementary to a sequence of two
XX portions of nucleic acid, contacting the nucleic acid and nanoparticles
XX to allow hybridization of the oligonucleotides with two or more portions
XX of the nucleic acid, and observing a detectable change brought about by
XX the hybridization. The nucleic acid to be detected must have at least two
XX portions and the distances between these are chosen so that when the
XX nanoparticle-oligonucleotide conjugate binds the target sequence a
XX detectable change occurs. The method of the invention is useful for
XX detecting two or more nucleic acids (from a biological source) having at
XX least two portions, such as viral RNA, bacterial or fungal DNA, a gene
XX associated with a disease, synthetic, or structurally-modified natural
XX or synthetic RNA or DNA, or a product of a polymerase chain reaction
XX amplification. Nanoparticle-oligonucleotide conjugates of the invention
XX are useful for preparing a nanoprobe conjugate for detecting an analyte,
XX and for detecting a nucleic acid bound to an electrode surface.
XX Nanoparticles and nanoparticle conjugates of the invention are useful for
XX nanofabrication and for separating a selected nucleic acid having two
XX portions from other nucleic acids. Diagnostic assays employing
XX nanoparticle-oligonucleotide conjugates improve the sensitivity of
XX nucleic acid detection methods and can be used to detect nucleic acids
XX that are present in only small amounts in a sample. The invention also
XX provides highly desirable nanoparticle-oligonucleotide conjugates. These
XX conjugates are stable with tailored hybridization abilities. The present
XX sequence represents a thiol modified oligonucleotide sequence used to
XX demonstrate the method of the invention
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 9.3e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 5393 AAAAAATTCAGAAAAGAAA 5412
XX |||||||
XX DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
XX
XX RESULT 924
XX ID ACH00064 standard; DNA; 20 BP.
XX
XX ACH00064;
XX
XX 15-OCT-2003 (first entry)
XX
XX Nanotechnology nucleic acid detection method oligonucleotide #54.
XX
XX Nanotechnology; nucleic acid detection; nanofabrication; nanoprobe; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1
XX /*tag= a
XX

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FT /mod_base= OTHER
FT /note= "OTHER= Thiol modified"
XX
XX US2003049631-A1.
XX
XX 13-MAR-2003.
XX
XX 10-OCT-2001; 2001US-00974500.
XX
XX 29-JUL-1996; 96US-0031809P.
XX 21-JUL-1997; 97MO-US012783.
XX 21-JAN-1999; 99US-00240755.
XX 25-JUN-1999; 99US-00344667.
XX 26-APR-2000; 2000US-0200161P.
XX 26-JUN-2000; 2000US-00603830.
XX
XX (NANO-) NANOSPHERE INC.
XX
XX Mirkin CA, Letsinger RL, Mucic RC, Storchhoff JU, Elghanian R;
XX Taton TA;
XX WPI, 2003-634854/60.
XX
XX Detection of nucleic acid having at least two portions, by contacting
XX nucleic acid and nanoparticles under conditions, which allows
XX hybridization of oligonucleotides on nanoparticles with at least two
XX portions of nucleic acid.
XX
XX Example 18; Page 44; 108pp; English.
XX
XX This invention relates to a novel method for detecting nucleic acids. The
XX method comprises providing nanoparticles with oligonucleotides attached
XX to them, which have a sequence complementary to a sequence of two
XX portions of nucleic acid, contacting the nucleic acid and nanoparticles
XX to allow hybridization of the oligonucleotides with two or more portions
XX of the nucleic acid, and observing a detectable change brought about by
XX the hybridization. The nucleic acid to be detected must have at least two
XX portions and the distances between these are chosen so that when the
XX nanoparticle-oligonucleotide conjugate binds the target sequence a
XX detectable change occurs. The method of the invention is useful for
XX detecting two or more nucleic acids (from a biological source) having at
XX least two portions, such as viral RNA, bacterial or fungal DNA, a gene
XX associated with a disease, synthetic, or structurally-modified natural
XX or synthetic RNA or DNA, or a product of a polymerase chain reaction
XX amplification. Nanoparticle-oligonucleotide conjugates of the invention
XX are useful for preparing a nanoprobe conjugate for detecting an analyte,
XX and for detecting a nucleic acid bound to an electrode surface.
XX Nanoparticles and nanoparticle conjugates of the invention are useful for
XX nanofabrication and for separating a selected nucleic acid having two
XX portions from other nucleic acids. Diagnostic assays employing
XX nanoparticle-oligonucleotide conjugates improve the sensitivity of
XX nucleic acid detection methods and can be used to detect nucleic acids
XX that are present in only small amounts in a sample. The invention also
XX provides highly desirable nanoparticle-oligonucleotide conjugates. These
XX conjugates are stable with tailored hybridization abilities. The present
XX sequence represents a thiol modified oligonucleotide sequence used to
XX demonstrate the method of the invention
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.3%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 9.3e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 5393 AAAAAATTCAGAAAAGAAA 5412
XX |||||||
XX DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
XX
XX RESULT 925
XX ID ACH03110/c
XX ACH03110 standard; DNA; 20 BP.
XX

```

AC ACH03110;
XX
DT 25-SEP-2003 (first entry)
XX
DE Immunostimulatory nucleic acid #745.
XX
KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
KW antitumor; gene therapy; vaccine; non-allergic inflammatory disease;
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
XX
OS Synthetic.
XX
PN US2003050268-A1.
XX
PD 13-MAR-2003.
XX
PF 29-MAR-2002; 2002US-00112653.
XX
PR 29-MAR-2001; 2001US-0279642P.
XX
PA (KRIE/) KRIEG A M.
XX (BERG/) BERG D J.
PI Krieg AM, Berg DJ;
PI WPI; 2003-521815/49.
XX
DR
XX
PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
PT disease by administering an immunostimulatory nucleic acid.
XX
PS Disclosure; Page 29; 229pp; English.
XX
CC The invention describes a method of treating non-allergic inflammatory
CC disease comprising administering to a subject having or at risk of
CC developing a non-allergic inflammatory disease an immunostimulatory
CC nucleic acid for prevention or treatment of the disease. The method is
CC useful for treating non-allergic inflammatory diseases, such as
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
CC This sequence represents an immunostimulatory nucleic acid
XX
SQ Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5129 AGGATGAGGAGGACATGGA 5148
DB 20 AGGATCAGAGGAGGACATGGA 1
RESULT 926
ACD99851
ID ACD99851 standard; DNA; 20 BP.
XX
AC ACD99851;
XX
DT 25-SEP-2003 (first entry)
XX
DE Immunostimulatory nucleic acid #537.
XX
KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
KW antitumor; gene therapy; vaccine; non-allergic inflammatory disease;
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
XX
OS Synthetic.
XX
PN US2003050268-A1.
XX

PD 13-MAR-2003.
XX
PF 29-MAR-2002; 2002US-00112653.
XX
PR 29-MAR-2001; 2001US-0279642P.
XX
PA (KRIE/) KRIEG A M.
XX (BERG/) BERG D J.
PI Krieg AM, Berg DJ;
PI WPI; 2003-521815/49.
XX
DR
XX
PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
PT disease by administering an immunostimulatory nucleic acid.
XX
PS Disclosure; Page 23; 229pp; English.
XX
CC The invention describes a method of treating non-allergic inflammatory
CC disease comprising administering to a subject having or at risk of
CC developing a non-allergic inflammatory disease an immunostimulatory
CC nucleic acid for prevention or treatment of the disease. The method is
CC useful for treating non-allergic inflammatory diseases, such as
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
CC This sequence represents an immunostimulatory nucleic acid
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5393 AAAAATATCAAAAAGAAA 5412
DB 1 AAAAATATCAAAAAGAAA 20
RESULT 927
ACD99847/C
ID ACD99847 standard; DNA; 20 BP.
XX
AC ACD99847;
XX
DT 25-SEP-2003 (first entry)
XX
DE Immunostimulatory nucleic acid #533.
XX
KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
KW antitumor; gene therapy; vaccine; non-allergic inflammatory disease;
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
XX
OS Synthetic.
XX
PN US2003050268-A1.
XX
PD 13-MAR-2003.
XX
PF 29-MAR-2002; 2002US-00112653.
XX
PR 29-MAR-2001; 2001US-0279642P.
XX
PA (KRIE/) KRIEG A M.
XX (BERG/) BERG D J.
PI Krieg AM, Berg DJ;
PI WPI; 2003-521815/49.
XX
DR
XX
PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel

PT disease by administering an immunostimulatory nucleic acid.
XX
PS Disclosure; Page 23; 229pp; English.
XX
CC The invention describes a method of treating non-allergic inflammatory
CC disease comprising administering to a subject having or at risk of
CC developing a non-allergic inflammatory disease an immunostimulatory
CC nucleic acid for prevention or treatment of the disease. The method is
CC useful for treating non-allergic inflammatory diseases, such as
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
CC This sequence represents an immunostimulatory nucleic acid
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAATACAAAAGAA 5412
Db 20 AAAAAAAAAAAAAAAAAA 1

RESULT 928
ACD99532/C
ID ACD99532 standard; DNA; 20 BP.
XX
AC ACD99532;
XX
DT 25-SEP-2003 (first entry)
XX
DE Immunostimulatory nucleic acid #218.
XX
KM Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
KM anticulcer; gene therapy; vaccine; non-allergic inflammatory disease;
KM psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
KM inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
XX
OS Synthetic.
XX
PN US2003050268-A1.
XX
PD 13-MAR-2003.
XX
PF 29-MAR-2002; 2002US-00112653.
XX
PR 29-MAR-2001; 2001US-0279642P.
XX
PA (KRIE/) KRIEG A M.
PA (BERG/) BERG D J.
XX
PI Krieg AM, Berg DJ;
XX
DR WPI; 2003-521815/49.
XX
PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
PT disease by administering an immunostimulatory nucleic acid.
XX
PS Disclosure; Page 14; 229pp; English.
XX
CC The invention describes a method of treating non-allergic inflammatory
CC disease comprising administering to a subject having or at risk of
CC developing a non-allergic inflammatory disease an immunostimulatory
CC nucleic acid for prevention or treatment of the disease. The method is
CC useful for treating non-allergic inflammatory diseases, such as
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
CC This sequence represents an immunostimulatory nucleic acid
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5393 AAAAAATACAAAAGAA 5412
Db 20 AAAAAAAAAAAAAAAAAA 1

RESULT 929
ADA25116/C
ID ADA25116 standard; DNA; 20 BP.
XX
AC ADA25116;
XX
DT 20-NOV-2003 (first entry)
XX
DE Secreted and transmembrane PRO protein associated primer #254.
XX
KM Human; secreted and transmembrane protein; PRO; gene; ss; tissue typing;
KM chromosome identification; vaccine; cancer; retinal disorder;
KM sports-related joint disorder; osteoarthritis; rheumatoid arthritis;
KM wound healing; obesity; diabetes; hearing loss;
KM cardiac insufficiency disorder; kidney disorder; nervous system disorder;
KM haemoglobin associated disorder; expressed sequence tag; EST.
XX
OS Homo sapiens.
XX
PN US2003050241-A1.
XX
PD 13-MAR-2003.
XX
PF 16-OCT-2001; 2001US-00978564.
XX
PR 17-OCT-1997; 97US-0062250P.
PR 03-NOV-1997; 97US-0064249P.
PR 13-NOV-1997; 97US-0065311P.
PR 21-NOV-1997; 97US-0066364P.
PR 10-MAR-1998; 98US-0077450P.
PR 11-MAR-1998; 98US-0077632P.
PR 11-MAR-1998; 98US-0077641P.
PR 11-MAR-1998; 98US-0077649P.
PR 12-MAR-1998; 98US-0077791P.
PR 13-MAR-1998; 98US-0078004P.
PR 20-MAR-1998; 98US-0078886P.
PR 20-MAR-1998; 98US-0078810P.
PR 20-MAR-1998; 98US-0078936P.
PR 20-MAR-1998; 98US-0078939P.
PR 25-MAR-1998; 98US-0079294P.
PR 26-MAR-1998; 98US-0079656P.
PR 27-MAR-1998; 98US-0079663P.
PR 27-MAR-1998; 98US-0079664P.
PR 27-MAR-1998; 98US-0079689P.
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PR 30-MAR-1998; 98US-0079920P.
PR 30-MAR-1998; 98US-0079923P.
PR 31-MAR-1998; 98US-0080105P.
PR 31-MAR-1998; 98US-0080107P.
PR 31-MAR-1998; 98US-0080165P.
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PR 31-MAR-1998; 98US-0080327P.
PR 01-APR-1998; 98US-0080328P.
PR 01-APR-1998; 98US-0080333P.
PR 01-APR-1998; 98US-0080344P.
PR 08-APR-1998; 98US-0081049P.
PR 08-APR-1998; 98US-0081070P.
PR 08-APR-1998; 98US-0081071P.
PR 09-APR-1998; 98US-0081195P.
PR 09-APR-1998; 98US-0081203P.
PR 09-APR-1998; 98US-0081229P.
PR 15-APR-1998; 98US-0081817P.
PR 15-APR-1998; 98US-0081819P.

PR 15-APR-1998; 98US-0081838P.
PR 15-APR-1998; 98US-0081952P.
PR 15-APR-1998; 98US-0081955P.
PR 21-APR-1998; 98US-0082568P.
PR 21-APR-1998; 98US-0082569P.
PR 22-APR-1998; 98US-0082700P.
PR 22-APR-1998; 98US-0082704P.
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PR 22-APR-1998; 98US-0082804P.
PR 23-APR-1998; 98US-0082796P.
PR 27-APR-1998; 98US-0083336P.
PR 28-APR-1998; 98US-0083322P.
PR 29-APR-1998; 98US-0083392P.
PR 29-APR-1998; 98US-0083495P.
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PR 29-APR-1998; 98US-008354P.
PR 29-APR-1998; 98US-0083558P.
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PR 30-APR-1998; 98US-0083742P.
PR 05-MAY-1998; 98US-0084366P.
PR 06-MAY-1998; 98US-0084414P.
PR 06-MAY-1998; 98US-008441P.
PR 07-MAY-1998; 98US-0084598P.
PR 07-MAY-1998; 98US-0084600P.
PR 07-MAY-1998; 98US-0084627P.
PR 07-MAY-1998; 98US-0084637P.
PR 07-MAY-1998; 98US-0084639P.
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PR 13-MAY-1998; 98US-0085323P.
PR 13-MAY-1998; 98US-0085338P.
PR 13-MAY-1998; 98US-0085339P.
PR 15-MAY-1998; 98US-0085573P.
PR 15-MAY-1998; 98US-0085579P.
PR 15-MAY-1998; 98US-0085580P.
PR 15-MAY-1998; 98US-0085582P.
PR 15-MAY-1998; 98US-0085689P.
PR 15-MAY-1998; 98US-0085697P.
PR 15-MAY-1998; 98US-0085700P.
PR 15-MAY-1998; 98US-0085704P.
PR 18-MAY-1998; 98US-0086023P.
PR 22-MAY-1998; 98US-0086392P.
PR 22-MAY-1998; 98US-0086414P.
PR 22-MAY-1998; 98US-0086430P.
PR 22-MAY-1998; 98US-0086486P.
PR 28-MAY-1998; 98US-0087098P.
PR 28-MAY-1998; 98US-0087106P.
PR 28-MAY-1998; 98US-0087208P.
PR 26-JUN-1998; 98US-0090863P.
PR 26-JUN-1998; 98US-0091010P.
PR 01-JUL-1998; 98US-0091359P.
PR 30-JUL-1998; 98US-0094651P.
PR 11-SEP-1998; 98US-0100038P.
PR 07-OCT-1998; 98WO-US021141.
PR 20-NOV-1998; 98US-0109304P.
PR 20-NOV-1998; 98WO-US024855.
PR 22-DEC-1998; 98US-0113296P.
PR 23-DEC-1998; 98US-0113621P.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 12-MAR-1999; 99US-0123957P.
PR 29-MAR-1999; 99US-0126773P.
PR 21-APR-1999; 99US-0130332P.
PR 26-APR-1999; 99US-0131022P.
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XX
XX (GETH) GENENTECH INC.
PA
XX Ashkenazi AJ, Baker KP, Botstein D, Desnoves L, Eaton DJ;
PI Herrera N, Fliviaroff E, Rong S, Garber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AJ, Hillan KJ;
PI Kijavini IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
XX WPI; 2003-521814/49.
DR
XX New isolated PRO polypeptides for example extracellular, secreted and
PI membrane bound proteins, useful for modulating the biological activities
PT of cells and for treating, for example diabetes, cancer, rheumatoid
PT arthritis, and hearing loss.
XX
XX Example 114; Page 193; 461p; English.
PS
XX The invention describes an isolated secreted and transmembrane (PRO)
CC polypeptide (I). PRO337 polypeptide is useful for detecting PRO493
CC polypeptide in a sample, and vice versa. PRO725, PRO700 and PRO739 are
CC useful for detecting PRO1559 polypeptide in a sample, and PRO1559 is
CC useful for detecting PRO725, PRO700 and PRO739 in a sample. PRO493 is
CC useful for linking a bioactive molecule to a cell expressing a PRO337
CC polypeptide, and PRO337 is useful for linking a bioactive molecule to a
CC cell expressing a PRO4999 polypeptide. PRO1559 is useful for linking a
CC bioactive molecule to a cell expressing a PRO735, PRO700 and PRO739
CC polypeptide, and PRO735, PRO700 and PRO739 polypeptides are useful for

Query Match 0.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 9.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 5196 TCAGCGTGGAGGCCACGCG 5215
DB 20 TCAGTGTGAAGGCCACGCG 1